



COMPANY PROFILE

COMPANY HISTORY

Principals of Pacific Pile & Marine, LP (PPM) collectively have over 80 years of industry experience. Prior to forming PPM, principals [Wil Clark](#) and [Eric Reichelt](#) jointly controlled Hurlen Construction Company. In 2002, Hurlen was acquired by American Civil Constructors (ACC). After managing ACC's growth from \$30 to over \$70 million in annual revenues, they sold their majority shares and exited the business. Shortly thereafter, they re-established their presence as a superior marine contractor, forming PPM in early 2008. Pacific Pile & Marine was formed to provide quality marine construction to the Pacific Northwest and Alaska.

Since its formation, the company has continued to excel in marine-based construction involving high degrees of technical and logistical difficulty providing exceptional latitude in the nature of work the company is capable of performing. Employee and public safety along with environmental safeguards are top priorities of PPM; leaders in the industry. Conducting operations in a safe and environmentally responsible manner are fundamental company principles. Our employees are committed to working in the safest manner possible consistent with company programs, good construction practices and in accordance with all OSHA and MSHA requirements. The philosophy of PPM is built around a dedication to safety, quality and innovation. We believe safety and quality are not simply priorities, they are core values and we refuse to sacrifice one for the other.

PPM traditionally employs a range of personnel between 50 and 70. The company owns a fleet of equipment including barges, cranes, hammers and excavators designed to target PPM's core competencies. In early 2009, PPM entered into negotiations with Lash Corporation to purchase, or lease-purchase, essentially all Lash-owned equipment, including an ABS certified barge. Since that acquisition, PPM established a physical presence in Kodiak and Anchorage in addition to the main office located in Seattle, WA.



COMPANY OVERVIEW

Pacific Pile & Marine, LP (PPM) is a privately held heavy civil construction firm specializing in upland and in-water pile driving, drilling for large diameter caissons, access trestles, cofferdam design and construction, sheet pile, shoring, pile sockets, rock anchors and tie-backs, dock and pier construction, production dredging, environmental dredging of contaminated marine sediments, foundations and heavy civil and marine construction services.

PPM currently provides quality heavy civil and marine construction throughout the Pacific Northwest, Montana and Alaska. Built on a dedication to safety, quality, and innovation, that philosophy has been institutionalized as cornerstone values designed to deliver the most efficient, outstanding results possible. Under the direction of [Wil Clark](#), [Eric Reichelt](#), [Chris Willis](#) and [Mike Mansfield](#), PPM is a firm believer in developing strong relationships aligning the interests of the company and client with the success of the project. PPM maintains a presence in Seattle, Anchorage and Kodiak. Driven by a desire to uphold our reputation for producing extraordinary results in the face of real-time obstacles, PPM is committed to delivering high degrees of value through proven, seasoned experience.

PRIMARY DISCIPLINES

Logistically Difficult Construction

Principals and personnel have been working in the Alaska market for over a decade. Our team specializes in projects requiring complicated logistics, seasonal restrictions, environmental constraints and long lead time materials. These types of projects require a dedication to pre-planning, a full understanding of the environment and excellent schedule control and logistical support.

Foundation Construction

PPM has the equipment and expertise to perform a wide range of land- and marine-based foundation services:

- Land- and water-based pile driving of steel, concrete and timber piles
- Work trestle construction
- Rock anchors, pile-socketing and large diameter shaft drilling
- Sheet pile cofferdam construction.
- Cast-in-place concrete.

Heavy Civil and Marine Construction

PPM brings with it over 30 years marine construction experience and continues to diligently develop those services with every project. Leveraging our solid base of resources, PPM personnel have completed many heavy civil construction projects throughout the Pacific Northwest, Montana and Alaska. PPM has the capacity and knowledge set to deliver quality marine-based infrastructure throughout North America.

Design-Build Construction

Experienced in alternative methods of contract delivery, PPM has currently been awarded design-build contracts including a \$30,500,000 design-build contract for the design and construction of the Carl E. Moses Small Boat harbor in Unalaska, AK.





Seabright Insurance Company presenting Pacific Pile & Marine with Safety Award

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Pacific Pile & Marine, LP
www.pacificpile.com

- HQ: Seattle, WA
- Employees: 65
- Services: Heavy Civil and Marine Construction

Putting Your Best Foot Forward

Representatives from Seabright Insurance Company presented Pacific Pile & Marine with its first safety award in 2009 for an outstanding safety record for the previous year. The award for exceptional safety was again presented in 2010. Safety is more than a priority; it's a core value that permeates everything we do as a company.

How our company is viewed by our clients and the public is largely driven by our commitment to delivering quality projects as safely and efficiently as possible. Our philosophy is built around a dedication

to safety, quality and innovation. We recognized the importance of environmental stewardship and continually seek low-impact alternatives. Conducting operations in a safe, environmentally responsible manner is a top priority of PPM; leaders in the industry.

"Our people are our greatest asset and our workforce is among the most skilled in the industry."

How it all Started

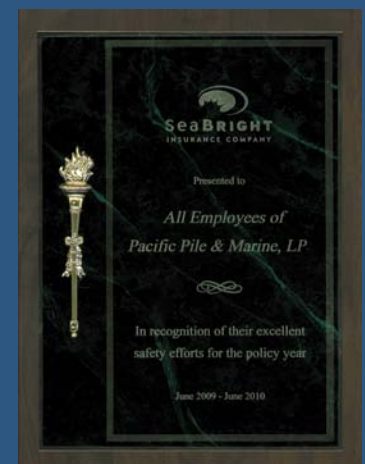
Founded in 2008, PPM has grown to become one of the most reputable marine contractors serving the Pacific Northwest and Alaska. In just two short years, PPM has worked on some of the most sophisticated water-based projects across the Western United States.

From the company's first day in business, its success has been directly related to its highly motivated and skilled employees. We are largely a people business and are proud of our consistent ability to find cost-effective solutions for our clients. Our people are our greatest asset and our

workforce is among the best in the industry.

While PPM has historically been a largely heavy bid contractor, our company has engaged in an increasing number of design-build contracts over the last two years.

With offices in Washington and Alaska, PPM is driven by a desire to maintain its reputation for producing extraordinary results in the face of real-time obstacles. PPM brings with it over 30 years of marine construction experience and continues to diligently develop its services with every project.



Seabright Insurance Company
 2010 Safety Award.

WILBUR CLARK, Project Sponsor

SKILLS SUMMARY Mr. Clark has over 25 years of experience in the construction industry. His responsibilities involve marketing, equipment maintenance and procurement program, project management, craft personnel management, and aiding with the estimating workload. He manages construction of some projects directly and supervises Project Managers, Superintendents, and Foremen on other projects. Coordinates with Owner Representatives, prepares contracts with owners, subcontractors and major suppliers. Prepares construction schedules and budgets, and monitors cost management systems. He has successfully completed several time sensitive projects in recent years.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2008 - Present

Principal/Project Manager

Seattle, WA

- 2010: \$Private Owner, Shell Offshore Mooring Dolphins, Offshore Systems, Inc., Unalaska, AK
Constructed a marine berth for the 265-ft diameter offshore drilling vessel Kulluk. The rig is currently under contract to the Shell Exploration and Production company to undergo a retrofit and is intended act as a relief well drilling rig in the Beaufort Sea. The berth consisted of four offshore breasting dolphins in combination with eight upland mooring arrangements. Construction activities included driving 35 offshore and upland piling, rock drilling, concrete filled piling, welding and steel fabrication. Pacific Pile & Marine also played a large role in the mooring process when the rig was moved into its berth. Crew worked in adverse weather to construct drilling platforms for Kulluk. Kulluk Mooring Facility is being constructed to prepare Shell for any oil response in relation to its Beaufort Sea operations. This was a unique project with an accelerated schedule in a harsh weather environment.
- 2010-2011: \$30,500,000, Design-Build Services, Carl E. Moses Small Boat Harbor, City of Unalaska, Unalaska, AK
Selected by the City of Unalaska to provide design-build services for the construction of the Carl E. Moses Small Boat Harbor. Project involves the fabrication and installation of hot-dip galvanized steel floats with grating. Floats sit on fastened steel pontoons for ease of access and repairs. Floats are anchored using robust pile system utilizing moment frames to support specific load requirements. The new boat harbor will be able to accommodate vessels ranging from 60 to 150-ft. in length. Also includes new harbor masters building and waste-oil building. Due to the remoteness of the location, careful scheduling and materials controls are in place throughout the project.
- 2009-2010: \$11,600,000, Former Scott Paper Mill Cleanup Phase II, Port of Anacortes, Anacortes, WA
Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark. Phase II involved both water-based dredging and upland excavation of contaminated soils, removing existing revetment structures and construction of new structures, installation of new small boat facility and installation of an offload apron on an existing pier. Project also involved improvements to existing pier facility, removal of existing timber-based breakwater and construction of two new attenuator structures.
- 2009-2010: \$9,600,000, Design-Build Services, Hebgen Dam Cellular Cofferdam, PPL Montana, LLC, West Yellowstone, MT
Designed a free-standing cellular cofferdam structure to provide the means to regulate flow through the Dam's intake in the event additional stop-log distress occurs. Also provided the means to dewater the inflow face of the intake structure in order for the structural repairs and seismic upgrade to be performed. Proposed structure was a freestanding cellular cofferdam constructed of interlocking flat web steel sheet piles filled with granular backfill material forming a traditional arrangement of 2 circular cells and an interior radial connecting cell. The top of structure is at elevation 6,540 feet and bottom of structure is founded on existing bedrock. Circular cells will be approximately 58 feet in diameter and spaced approximately 70 feet from center with a sheet pile length 85-ft. and maximum 90-ft.

- 2009-2010: \$2,800,000, Terminal 115, Port of Seattle, Seattle, WA
Terminal 115 is a Superfund site, requiring careful environmental consideration. The purpose of this project was to build a new barge loading and unloading facility. Included sheet pile installation, upland and in-water pile driving, maintenance dredging of contaminated materials, demolition and removal of an existing wooden pier, the rebuild of two existing piers including new steel fendering system and installation of a ramp lifting mechanism. During dredging operations, PPM encountered numerous obstructions including industrial equipment intermingled with the contaminated sediment throughout the marine environment along with inconsistent client-provided survey data. The Owner ultimately requested an accelerated schedule. Upland and in-water pile driving began in tandem with dredging activities to meet critical path items. Approximately 20 pile were driven both upland and in-water ranging from 16 to 24 to 48-in. After upland pile were driven, electrical and mechanical installation of utilities began along with sand capping and in-water pile driving. Areas being dredged had elevated chemical concentration levels requiring expedient resolution of survey issues. Surveys were quickly corrected and accepted to prevent cross contamination. After in-water pile driving was completed, concrete winch pads and ramp abutments for winches were poured ending the in-water work. Following the winch installation, PPM began rebuilding the ends of two existing piers and assembling the new steel fendering system. Following completion of the fendering system, PPM assembled and installed a ramp lifting mechanism that can be raised and lowered for barge loading and unloading. Defects in the design of the assembly caused an uneven distribution in the pulley system resulting in lowered performance ratings which did not meet safety recommendations. PPM participated in a value-engineering review that was able to cost effectively resolve the issue. Efficient management of the challenges presented by the unforeseen site conditions, deficient design, inconsistent survey data and changing scopes of work allowed PPM to meet and exceed the end date under the accelerated schedule.
- 2009: \$3,300,000, Small Boat Harbor Entrance Surge Protection, Municipality of Skagway, Skagway, AK
Built wave barrier wall to protect the harbor from swells. Involved king pile, spin fin piling and sheet pile. Built promenade on top of wall. Surveying was a challenging component with arc wall. Pile driving, fabrication, surveying and welding were required for the project.
- 2009: \$350,000, Kodiak Repair Cargo Wharf Fender System, US Coast Guard Kodiak, Kodiak, AK
Repaired fender system at pier 2.
- 2009: \$260,000, False Pass Harbor Construction, Lash Corporation, False Pass, AK
Assisted with construction of breakwater and constructed boat harbor.
- 2009: \$180,000, Port of Seattle Open Works, Port of Seattle, Seattle, WA
Perform dock and piling work. Work may include fender systems, fender piles, mooring piles, support piles, dolphin piles, bulkheads, floats, bull rails, or camels.
- 2008-2010: \$7,500,000, Sandpoint North & South (Sand Creek Byway), Parsons Corporation / RCI, Sandpoint, ID
Phase Installed temporary sheet pile crane pads piers 1, 2, and 3, drove test piles, drove pile, SP bridge pile restrike, installed bridge temporary access, drove sheet pile for cofferdams. Unloaded the pipe and sheet pile at point of installation. Drove, spliced, and cut-off test and production piles and permanent sheet piles. Installed, removed, and preloaded all temporary sheet piles. Designed, furnished, installed, and removed a 30-ft. by 300-ft. work bridge.

- 2008-2009: \$14,100,000, Dakota Creek Shipyard Redevelopment, Dakota Creek Industries, Anacortes, WA
Major redevelopment and expansion of the Dakota Creek Industries (DCI) Shipyard. During Phase I, demolished and removed 24,000 square feet of timber dock, 1,000 creosote treated piles, 250 feet of abandoned marine railway, buildings and utilities. Dredging and excavation activities involved dense, difficult and contaminated materials. Dredged more than 30,000 cubic yards of contaminated material using an environmental-sealed bucket, placed material on flat decks and transported for disposal at an upland disposal site. 105,000 cubic yards of non-contaminated material dredged utilizing custom bucket configurations with a jet-probe to loosen material. Constructed thirteen circular sheet-pile open cells to be back filled for additional dock space. An innovative 450-ft. long OPEN CELL bulkhead with heavy-load capacity and up to 49 feet of vertical face was used. Over two acres of upland development including a state-of-the-art two-stage stormwater treatment system with new outfall was developed as well as two deep water berths. Shipyard structures were relocated and rip rap slope protection placed. Phase II consisted of constructing a 370-ft. long heavy-load pier utilizing SPIN FIN pile technology and a ballast deck system and completion of uplands. Central pier was designed to handle a 275 ton crane with a 220-ft. boom. Project was a finalist for AGC's 2010 Build Washington Project of the Year award.
- 2008-2009: \$10,400,000, St. Herman Harbor Boat Lift Facility, City of Kodiak, Kodiak, AK
Constructed new boat lift piers consisting of steel pipe piles, composite steel and concrete deck girders, and concrete backwall. Constructed dolphins consisting of steel pipe piles, rock anchors, steel pile cap and fenders. Installed prefabricated catwalks.
- 2008: \$1,900,000, Lake Washington Dry Dock Removal, Washington State Department of Natural Resources, Seattle, WA
Consisted of the deconstruction of two derelict dry docks sunken in 25 feet of water and resting on the sediment surface on southern Lake Washington adjacent to the city of Renton. The dry docks were too damaged to be easily raised from their sunken state. The dry docks were deconstructed in-water while being enclosed in a full depth, anchored turbidity curtain. Special precautions were needed as to not disturb the site as it is a contaminated superfund site. The debris generated was loaded onto barges and sent to an appropriate disposal site. The project called for confined space diving and suction dredging of the sediment from the barges ballast tanks.
- 2008: \$1,700,000, Marine Terminal Berths 2 and 3 Interim Action Dredging, Port of Olympia, Seattle, WA
Maintenance dredging of 9,700 cubic yards of contaminated material along the port facility pier. The dredge sediment was then transported by rail to landfill and a thin sand layer was placed through the dredge prism to prevent cross contamination.
- 2008: \$530,000, Pier 56 Emergency Pile Repair, Martin Smith, Seattle, WA
Conducted emergency pile repairs.
- 2008: \$430,000, Des Moines Marina Maintenance, City of Des Moines, Des Moines, WA
Dredged boat ramp area, south outfall, and north outfall. Removed and offloaded pile. Dredged suitable sediments in the entrance channel in the marina interior with disposal at the DMMP open-water disposal site.
- 2008: \$350,000, Barker Creek Culvert Replacement Project, McDonald & Company, Silverdale, WA
Furnished, installed, and removed sheet pile shoring.
- 2008: \$430,000, Fairweather Place Steel Sheet Pile Wall, Town of Hunts Point, Hunts Point, WA
Provided and installed 210 linear feet of new steel sheet pile wall of minimum 45-ft. depth along the margin of Haug Channel.
- 2008: \$180,000, Martin Smith Phase II, Martin Smith, Seattle, WA
Conducted repairs.
- 2008: \$150,000, Wiley Slough Estuary Restoration Phase I, Northwest Construction, Conway, WA
Furnished and installed permanent sheet for cut-off wall. Furnished, installed, and removed two temporary sheet pile cut-off walls approximately 46 feet long upstream and downstream of the dike pipe crossing.
- 2008: \$32,000, Ivar's Salmon House, Ivar's Inc, Seattle, WA
Installed 180 cubic feet of floatation under the existing moorage adjacent to the concrete barge.

Owner/Vice President*Seattle, WA*

- 2007: \$28,500,000, South Channel Bridge, AK DOT, Unalaska, AK
Construction of a multi-span steel bridge comprising four 108-in. diameter drilled shafts and two cast in place abutments. Superstructure was precast girders with insitu deck. The pile driving was executed using floating equipment. After pile driving, bedrock was drilled to depth of 40 feet at 108-in. diameter using pile top drilling. Project was nominated for the Deep Foundation Institute Project of the Year.
- 2006-2007: \$34,000,000, Ketchikan Berth 3 Reconfiguration, City of Ketchikan, Ketchikan, AK
Constructed 21,000 square feet of pile-supported dock with drilled pile-to-bedrock anchored connections, 5 deepwater 48-in. diameter steel pipe pile dolphins with drilled and pinned pile to bedrock connections and 18,000 square feet hardwood decked promenade as well as installed 26,000 square feet of monolithic concrete floats held in place by socketed piling and a 15,000 square foot floating dock accessed by a 130-ft. long transfer span.
- 2006: \$10,200,000, Campbell River Cruise Ship Terminal, Campbell River Indian Band, Campbell River, BC, Canada
Construction of a multipurpose dock to serve as a landing platform for passenger access between ship and shore. Consisted of 750-ton concrete pontoon linked to a shore by a 140-ft. long gangway and 200-ft. long trestle. The facility spans 1,400 feet off shoreline. 164 ea. pilings were installed under eight mooring and berthing dolphins. Construction was conducted under extreme conditions, including high winds, tides and fast currents. Anchoring barges and derricks became a key factor in maintaining maritime and employee safety while constructing the terminal.
- 2005: \$7,300,000, Ferry Terminal Modification, AK DOT, Whittier, AK
- 2004-2005: \$5,100,000, Adak Small Boat Harbor, City of Adak, Adak, AK
Construction of an open cell sheet pile wall with excavation and dredging to form a new small boat harbor. Due to environmental reasons and permitting restrictions, the project had to be completed during the winter months. Involved massive mobilization of construction, quarrying and rock blasting equipment and transfer of all material from Seattle to the island via tug and barge. The tow to the island took four weeks. In order to produce necessary riprap materials, blasting and development of a quarry commenced upon arrival. A 100-ton crawler crane, part of the mobilization, was used to install sheet piling. After sheet piling was completed, dredging to deepen the harbor started with riprap placement on the slopes.
- 2003-2004: \$8,600,000, Lockheed Shipyard Remediation, Seattle, WA
Dredged and disposed of materials including debris, soil, creosote treated wood and the recycling of wood, concrete, concrete with rebar and steel. Major components of RA included replacing existing deteriorated bulkhead wall, removal of all existing pier structures including timber piling and portions of the existing shipway structures from aquatic areas of the site while maintaining stability, dredging of contaminated sediments from the channel and slope areas, design of the dredge prisms, perform post-dredge sediment verification sampling and analysis, construction of on-site mitigation area, creation of intertidal habitat with clean soil and capping of the slope area.
- 2003-2004: \$5,075,982, Jacobsen Dock Cruise Ship Pier, SE, Juneau, AK
Designed and constructed a cruise ship pier in Juneau. Involved pile driving 143 ea. 36 and 24-in. diameter steel piles using a floating derrick barge. Pile length varied from 120 to 320 feet in length. The pile were pitched using an APE 200 Vibro-hammer and driven to bearing capacity using an ICE 180 or an ICE 120-S diesel hammer depending upon location. All the steel piles and structural steel was transported to Alaska on our barges. Fast tracking the project demanded intense materials control to ensure on-time completion. Project was completed two weeks early.
- 2003: \$6,500,000, Ferry Terminal, Washington Ferry System, Shaw Island, WA

- 2002: \$6,000,000, Columbia & Cowlitz Railway Bridge #7 Trestle, Weyerhaeuser Company, Longway, WA

The Columbia & Cowlitz Railway Bridge #7 was severely damaged by fire effectively destroying 900 feet of structure. The loss of the bridge forced Weyerhaeuser to absorb alternative transportation costs creating a need for an expeditious repair of the bridge. A design-build contracting method was selected for the project. The project consisted of 700 feet of curved elevated railroad bridge structure and repair of another 200 feet of existing structure. The new bridge structure was supported by driven steel piles on 50-ft. centers spanned by rolled steel girders and an open deck. The new structure minimized the number of piles using large diameter piles in a rigid frame system along with spin fin pile tips. Spin fin piles were used to minimize cost and meet the schedule requirements of the owner. Spin fin piles also provided assurance the tensile and compressive capacities would be met on the project standard smooth piles could not. Minimizing the number of piles was critical in shortening the project and allowing for an accelerated construction schedule to lower the construction impact to surrounding residencies. Close coordination was necessary as special modifications, material acquisition and design specifications were utilized to meet the challenges of the project.

- 2002: \$4,000,000, Environmental Dredging, Port of Olympia, Olympia, WA
- 2001: \$2,500,000, Bridge Construction, BNSF, Everett, WA

HURLEN CONSTRUCTION COMPANY, INC.

1995 – 2002

Principal/Project Manager/Superintendent

Seattle, WA

Responsible for successful and effective execution of projects including financial performance and reporting, site safety programs and owner relations. Responsibilities also involved oversight of major contract negotiations/modifications, materials procurement, preparation and maintenance of schedules, supervising staff, directing skilled craftsmen and coordinating subcontractors.

- 1998-1999: \$2,295,000, Edmonds Ferry Terminal – Dolphin Replacement, Washington State Ferries, Edmonds, WA

Introduction of the State's new Super Ferries mandated a need for larger and stronger mooring dolphins. Hurlen performed one of the first installations of offshore steel "Super Dolphins" at the Edmonds Ferry Terminal. 56 ea., 36-in. diameter steel pipe piles were driven in four tight clusters and then linked together with four structural steel frames (1 per dolphin). These piles were manufactured in Japan from 60-KSI steel with a 1 inch wall thickness. A complex fender system of UHMW and rubber fender elements was installed on the face of the steel frames to attenuate ferry loads. Pile driving templates were used to achieve critical pile alignment since these were driven within 3 diameters of one another.

- 1997-1999: \$6,075,000, Bremerton Ferry Terminal – Passenger Overhead Loading, Washington State Ferries, Bremerton, WA

Built structure to replace an existing passenger-overhead loading system that had deteriorated and was capable of only servicing one of the two slips at Bremerton. Included demolition of an existing overhead loading facility, installation of four 6-ft. and one 10-ft. diameter caissons with cast-in-place concrete columns built atop them. Fabrication and installation of a 140-ft. long by 20-ft. wide structural steel loading gangway that weighed 100 tons. A 165-ton Derrick Barge lifted the span into place. Hydraulically powered elevator using housings were installed in the largest caisson to provide a 25-ft. vertical lifting assembly for raising and lowering the gangway. A complete upgrade of the terminal electrical system was made during this project. Challenges involved construction phasing to allow 24 hour operational status of the state ferries and excavation of the offshore caissons to a depth of 45 feet below the sea floor. A suction dredge was used during excavation and the use of silt curtains and debris booms contained silt preventing environmental problems.

- 1997-1998: \$5,141,000, Southwest Harbor Expansion – Terminal 5, Port of Seattle, Seattle, WA
Featured construction of a new pedestrian and vehicle access bridge as well as a new rail bridge. The primary project function was to improve rail traffic into the Port's Terminal 5 and 18 facilities while improving commuter access to the North end of Harbor Island. Challenges involved coordinating with city agencies for relocation of utilities and conducting construction activities within close quarters of active power lines and an existing railroad bridge. Also included marine pile driving of 93 piles across the East Channel of the Duwamish River followed by cast-in-place concrete cap construction, pre-cast concrete panel installation, topping slab installation and constructing 5,600 linear feet of new railroad track. Upland grading and construction of the approaches to the vehicle access bridge accounted for a large portion of the project. A comprehensive vibration-monitoring program was instituted during installation of production piles at the new structures. The program was designed to identify and mitigate potential damages to the existing Rail Bridge, building structures and computer equipment located within the buildings.
- 1997-1998: \$5,000,000, Cornelius Pass Railroad Bridge, Portland Western Railroad, Multnomah, OR
Replaced a 480-ft. timber trestle 90 feet off the ground at the center span with 10-ft. below-ground footings drilled into bedrock. Design uses a foundation of driven piles and columns with footings founded on bedrock. Simple spans of 80 feet between foundation bents are composed of twin steel box girders, which support the open deck. Steel metalized with zinc, with galvanized grating along one side. Twin pipe piling is .609 wall hot dip galvanized to ASTM standards. Project saves a 30-mile detour for freight trains. Because of the area's humidity and the difficulty of maintenance, hot-dip galvanizing was selected as the optimal method of protection. The new 800-ft. long bridge is subject to earthquakes & severe wind gusts in inaccessible terrain and humid weather conditions. A design-build contracting method was selected for the project.
- 1996-1998: \$2,200,000, Seattle Ferry Terminal - Pedestrian Access and Elevator Upgrades, Washington State Ferries, Seattle, WA
Involved the upgrade of the passenger entrance to the Seattle Ferry Terminal to improve access for pedestrians and handicapped commuters between street-side passenger drop off areas and the existing terminal building. Construction was initiated by partial demolition of an existing dock structure followed by 16 driven steel piles to provide a foundation for an elevator pit. Fabrication and erection of a multi-level architectural concrete shaft was performed to accommodate two passenger elevator cars. An architectural concrete storefront and stairway access was constructed at the entrance. Challenges involved building around commuter traffic and coordinating work activities of 17 subcontractors within the confines of the elevator shaft. Crew successfully completed the project on schedule and Hurlen received an outstanding evaluation for the Owner.
- 1996-1997: \$1,732,000, Vashon Ferry Terminal – Primary Slip Reconstruction, Washington State Ferries, Seattle, WA
Involved the complete removal and replacement of an existing loading ramp and berthing wing-walls at the primary slip of the Vashon Island Ferry Terminal. Construction of the two new wing-walls involved driving several 30-in. diameter steel piling on a 5:12 batter to resist bearing forces introduced by berthing ferries. Similar vertical piles were installed to resist uplift forces. Piles were linked together by structural steel frames that incorporated a complex fender system to attenuate ferry landings. A new 24-ft. wide structural steel loading ramp spanning 90 feet was fabricated for installation on the job. The ramp incorporated an upgraded electrical system and new hydraulics. Electrical upgrades were made at two other existing slips as well. Portions of the timber pier and bridge seat were rebuilt to accommodate increased span length at the new bridge. Although longer than the previous span, the new bridge was actually lighter as a result of incorporating a lightweight concrete slab poured over a steel pan-formed soffit.

- 1995-1996: \$1,309,000, Seattle Ferry Terminal, Pier 52 – Slip No. 3 Wing-wall Replacement, Washington State Ferries, Seattle, WA
Replaced two aging and deteriorated timber wing-walls with new structures at the main ferry terminal in Seattle. Involved driving several 30 inch diameter steel piling on a 5:12 batter to resist bearing forces induced by berthing ferries. Similar vertical piles were installed to resist uplift forces. These piles were linked together by a structural steel frame incorporating a complex fender system to absorb energy during ferry landings. Challenges involved an Owner requirement to complete the project within a 20 day work window. Work was performed amongst berthing ferries operational on a 24 hour basis. Tide cycles further complicated work by limiting welding time for work occurring below high water line. Despite this requirement, the project was successfully completed on time per the Owner's schedules.
- 1995-1996: \$1,766,000, Union Wharf Replacement, City of Port Townsend, Port Townsend, WA
Involved demolition and construction of a new wharf and boat mooring. Key features included the demolition of building structures contaminated with asbestos and demolition of a failing concrete timber dock situated in an environmentally sensitive area. New wharf construction involved driving 133 pre-cast, pre-stressed 18-in. diameter concrete pile. Cast-in-place caps were constructed in a unique configuration to duplicate those of the original structure. A new timber deck section was designed and built to support the fire-fighting vehicles and support equipment. Other components included electrical and mechanical systems and erection of a civic building.

GENERAL CONSTRUCTION COMPANY, INC.

1986 – 1995

Project Manager/ Project Engineer

Seattle, WA

Responsible for management of jobsite operations, financial performance and reporting, site safety programs, materials procurement, owner relations, and scheduling. Supervised project engineering staff, project superintendents, and project office staff. Was responsible for directing skilled craftsmen, directing survey crews and coordinating subcontractors.

- 1994-1995: \$4,200,000, Deadwood Creek Bridge, Federal Highway Administration, Mount Rainier, WA
Featured construction of a single-lane arch span concrete bridge over Deadwood Creek Canyon in Mt. Rainier National Park. The new bridge replaced an existing deteriorated concrete structure. Limited site access required the use of a high-line hoisting tower to provide crane service over the middle of the canyon. Controlled blasting was used to demolish footings and expand rock shelves in the canyon walls. Installation of rock-anchored foundation piles and falsework system provided a platform for new bridge construction. Cast-in-place concrete was formed and poured to establish the footings, columns, arch-span girders, road deck and traffic barrier of the new bridge. The FHA required the use of special concrete forms to achieve the architectural appearance of a stacked rock wall. A local artist who gave the concrete a weathered and natural appearance painted the finished wall surface. The jobsite location was remote and situated 90 miles from the nearest population center. This presented significant scheduling challenges in terms of material procurement and subcontractor coordination. EFCO Forms Corporation designed and provided a forming system that was pre-assembled and delivered to the jobsite in modules limited in size by the capacity of the High-Line Tower. A concrete batch plant was set up on-site to produce all the concrete needed for the project.

- 1993-1994: \$2,500,000, Interstate 90 – Phase 3 Traffic Switch, Washington State Department of Transportation, Mercer Island, WA
This project was a continuation of the Lacey V. Murrow (LVM) Floating Bridge Replacement Project on Lake Washington. When the LVM Bridge sunk in 1991, the DOT diverted eastbound I-90 traffic into the reversible High Occupancy Vehicle (HOV) lanes of the adjacent north floating bridge. Following installation of the replacement bridge, the traffic switch project re-directed traffic onto it from the HOV lanes to the adjacent north (westbound) bridge. Included construction of a new off-ramp from eastbound I-90 to the West Side of Mercer Island. The unfinished express lanes from the Mt. Baker Tunnel to downtown Seattle were also completed. Involved wall construction, roadway grading and paving, channelization and traffic routing. At each end of the LVM Bridge, detours were removed and this portion of the roadway was returned to its initial configuration prior to the bridge sinking. Two emergency vehicle access roadways and parks were also constructed. Challenges involved complex construction phasing, a complete shutdown of eastbound I-90 during the switchover and providing traffic safety control. In order to provide worker protection from traffic, over 5 miles of barriers were set, reset and removed. More than 10 miles of multi-lane roadway was re-channelized (traffic marking) over the course of the project.
- 1991-1993: \$24,000,000, Berth 30 Construction, Port of Oakland, Oakland, CA
This marine structure project consisted of a new ship-to-shore container facility endeavored in by the Port of Oakland link to upland rail and truck loading facilities with a 1,050-ft. wharf to berth container ships and support container cranes. Challenges involved the proper removal and storage of contaminated material dredged from the new wharf location and taken to an upland storage site provide by the Port. Materials were not part of the original contract scope and discovered after work had begun. The discovery resulted in a significant cost impact to the project. Fortunately, a strong partnering relationship between the parties allowed this issue to be resolved timely and equitably. Forming and pouring a 5-ft. thick cast-in-place concrete deck atop the pile caps also proved a formidable task requiring extra planning, design and coordination. Other project highlights included 315,000 cubic yards of dredging and excavation, 377 pre-stressed concrete pile, 124,000 tons of rock placement, 14,000 cubic yards of cast-in-place pier deck, 2,100 feet of crane rail, a 1,050-ft. long fender assembly and installation of electrical and mechanical systems.
- 1991-1993: \$3,000,000, Berth 40 Construction, Port of Oakland, Oakland, CA
This marine project involved the rehabilitation of a concrete wharf damaged in the 1989 Loma Prieta Earthquake. Demolition of shore-side pile caps and associated piling was performed to allow construction of new piles and pile caps. Cast-in-place pier deck was poured across the new inshore pile caps and overlaid the on the remaining offshore wharf deck to tie the system together. To make this system effective, thousands of vertical dowels were drilled into the existing deck to reconnect the new deck.
- 1990-1992: \$17,000,000, Interstate 90 - Bellevue Access Bridge Construction, Washington State Department of Transportation, Bellevue, WA
The overpass was built to relieve traffic congestion on the I-90 corridor where it junctions with I-405. Consisted of installing drilled shafts and driven piles through a wetland area followed by construction of cast-in-place concrete columns and pier caps, structural steel erection and a cast-in-place concrete roadway deck. 1,200,000 pounds of structural steel was installed along with cast-in-place concrete box-girder beams, cast-in-place concrete traffic barriers and the construction of a 900-lft. temporary work trestle.

- 1988-1991: \$42,400,000, Alsea Bay River Bridge Replacement, Oregon Department of Transportation, Walport, OR
Built in 1932 along the Oregon Coast, the original Alsea River Bridge was comprised of concrete foundations and riveted structural steel framing. Although deteriorated, it proved a formidable structure to raze and was taken down by crews with experience in underwater blasting. Construction was performed over a wildlife estuary, presenting environmental challenges to the project. New bridge featured 2,910 linear feet of post-tensioned twin box girders spanning between Y leg piers with 13 pre-stressed concrete box girders, 43,000 cubic yards cast-in-place concrete, a travelling form system, 14 cofferdams, 50,000 linear feet of 24-in. pipe pile and a 350-lft. steel arch span made from 750 tons of structural steel supported on 100-ft. wide Y leg piers. A 1,200-lft. temporary work trestle with turnouts was installed to allow access for crawler cranes. Replaced converted cast-in-place on falsework box girder with segmental structure providing 70 feet of navigational clearance. Steel and concrete piles reach more than 100-feet into the bedrock below. Project won an ACI award in 1992 for its architectural appearance achieved by a unique forming system which produced split-leg, compound-radius structural support columns for the structure.
- 1988-1991: \$14,000,000, Charleston Bay Bridge, Oregon Department of Transportation, Charleston, OR
This marine project represented another replacement of an aging and deteriorated bridge along the Oregon Coastline. Featured 600 linear feet of temporary trestle, the installation of a 700-lft. double bascule bridge, 800 linear feet of approaches, 64 ea. 24-in. pre-stressed concrete piling and 11,000 cubic yards of cast-in-place concrete. Erection of 54 ea. pre-stressed bulb tee concrete beams and a control house complete with all of the electrical and hydraulic systems. Challenges involved the placement of concrete pontoon cells on the river bottom. A seal pour was made in these structures at 15 feet below water line and then foundation piles were driven through the seal. Footing concrete was then placed to complete these foundations for the two bascule structures.
- 1987-1998: \$2,900,000, Bremerton Ferry Terminal, Washington State Ferries, Bremerton, WA
Project initiated a 12 year expansion program, by the State at the Bremerton Terminal, to meet growing commuter demands on this gateway to the Olympic Peninsula. Included demolition of an active passenger terminal building, new construction of a temporary terminal building, construction of traffic detours, installation of a pile-supported foundation with cast-in-place concrete caps and deck and upgrading the mechanical and electrical systems. Improvements made on the project were considered temporary until more property and funding could be secured. An existing passenger overhead-loading ramp is the only portion of the terminal intact from the days when World War II shipyard workers crowded the ferries between Seattle and Puget Sound Naval Shipyard in Bremerton. It has been recognized by the State as a historical site. The ramp was renovated during this project.
- 1986-1988: \$9,000,000, Port Hueneme – Berth 2, Port of Hueneme Port Oxnard, CA
Facility constructed to allow Port expansion and primarily used as an automobile import facility. Included dredging, slope protection, 500 ea. 24-in. diameter pre-stressed concrete piles, an underwater sheet pile wall, 80,000 square feet of cast-in-place pier deck, fender system, electrical, mechanical and upland improvements.
- 1986-1987: \$4,100,000, Dakota Creek Industries – Syncro-lift & Pier, Dakota Creek Industries, Anacortes, WA
During the mid 80's, Dakota Creek Industries launched a program to expand their existing shipyard and increase their production capacity. As part of the program, a 100-ft. wide by 180-ft. long graving dock was built with the inclusion of a syncro-lift (ship lift). The lift involved the installation of 48 winches supported by concrete foundations used to raise vessel, displacing up to 2,400 tons, out of the water. A sophisticated electrical system was installed to synchronize the 48 winches into a simultaneous lift. Included clamshell dredging of 35,000 cubic yards and 400 linear feet of cutoff sheet pile wall. 150 ea. 16-in. diameter pre-cast, pre-stressed concrete walls were driven to support a pier behind the syncro-lift and around the perimeter of the graving dock. 24-in. diameter pre-cast, pre-stressed concrete piles were driven close together at the face of the graving dock to support winch loads. Also included deep cast-in-place pile caps to support heavy loads, installation of pre-cast deck panels, a timber fender system and electrical and mechanical systems. Stringent construction tolerances had to be met in order for the syncro-lift to function properly.

- 1986: \$1,900,000, Pier 90-91 Rehabilitation, Port of Seattle, Seattle, WA
Located at the north end of the Port, Pier 90-91 is a facility where cars are imported from Asia and offloaded from the ships. In 1986, the existing 1 mile timber pier underwent a major renovation that included demolition of rotten sections, piling, cap and stringer replacement and installation of new timber decking. The owner was closely involved with the project on a daily basis to assess exposed damaged areas and set priorities for repair schedules as they related to costs.

JENSEN & REYNOLDS CONST. CO., INC.

1984 – 1986

Project Engineer/ Field Engineer

Seattle, WA

Responsible for coordinating of subcontractors, in-house survey effort, in-house design effort, entry and maintenance of project cost controls, purchasing control, and project buildings.

- 1985-1986: \$6,200,000, Port of Longbeach – Berth 62, Port of Longbeach, Longbeach, CA
Berth 62 is a bulk-shipment facility specifically constructed to handle steel imports from Asia. 100,000 cubic yards of bottom deposits were dredged. Other project highlights included placement of 50,000 tons of slope protection and the setup of a pile casting yard for manufacture of 24-in. diameter pre-stressed concrete piles, cast-in-place cap and deck installation and fender elements. The most interesting component of the project involved the action taken to prevent ground water movement while working in close proximity of active oil wells. A soldier pile and lagging shoring system was set up on the offshore side of each well to prevent soil migration and ensure accurate alignment of the well was maintained.
- 1984-1986: \$12,100,000, Sealand Container Facility, Port of Tacoma, Tacoma, WA
The Sealand Container Facility is a ship-to-shore (intermodal) container-handling facility designed and constructed to provide high-volume cargo transfer for the Port of Tacoma. Included construction of a 1,200-lft. wharf incorporating 800 e.a. 24-in. diameter pre-stressed concrete piles, concrete deck panels, riprap slope protection and a fender system.
- 1983-1984: \$2,200,000, Port of Port Angeles – Berth 62, Port of Port Angeles, Port Angeles, CA
Replaced an aging log loading dock. Consisted of a full wharf demolition, installation of 150 e.a. 16-in. diameter concrete piles, pre-cast deck panels and a fender system.

CONSTRUCTORS PAMCO, INC.

1984 – 1986

Foreman/Miner

Seattle, WA

Responsible for coordinating of craftsmen, interpretation of plans and specifications, relations with owner personnel, survey layout, equipment resources, and work activities.

- 1984: \$17,800,000, Culmbach Dam – Spada Lake Hydroelectric Project, Sultan, Washington P.U.D., Sultan, WA
Entailed the construction of a new intake structure at Culmbach Dam to provide water for a downstream powerhouse. Water was transferred from spillway to powerhouse via a 300-ft. long by 18-ft. diameter hard rock tunnel mined by PAMCO. A 300-ft. long by 12-ft. diameter airshaft was constructed vertically alongside the spillway to intersect with the larger tunnel at the bottom of both tunnels. This served as a vent and allowed trapped air to escape instead of pressurizing.
- 1982: \$2,100,000, Hess Creek Bypass Tunnel, Publisher's Paper, Inc., Newberg, OR
Constructed 1,400 linear feet of 12-ft. diameter, soft ground tunnel. The purpose was to divert a natural creek underneath a chemical pond and ensure the stream's water was not contaminated. Tunnel construction involved the use of a 12-ft. diameter Robbins open-faced, hydraulic tunnel boring machine, manual soil removal and casting of an 8-ft. diameter cast-in-place concrete lining.
- 1980: \$5,800,000, Eastside Interceptor Tunnel, City of Portland, Portland, OR
Constructed tunnel routed through downtown Portland to replace 2,100 linear feet of main trunk in the City's sewer system. A 12-ft. diameter, soft-ground tunnel was constructed and then lined with an 8-ft. diameter cast-in-place concrete casing. Deep porthole shafts were mined at mid points along the structure.



- 1979: \$1,900,000, Dryden Tunnel, Chelan County P.U.D., Chelan, WA
Replaced an existing irrigation flume with a new tunnel that bypassed a major portion of the existing tunnel where it was routed through a hillside. 600 linear feet of 12-ft. diameter, soft-ground tunnel was constructed. Tunnel construction involved hydraulic advancing of an outer casing, manual soil removal and an 8-ft. diameter cast-in-place concrete lining.
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EDUCATION

B.S. Construction Management, Oregon Institute of Technology, Klamath Falls, OR
Construction Executive Program, Texas A&M University, College Station, TX

Training & Accreditations:

Certified OSHA 40-Hour
Certified First Aid and CPR
Member, Western Dredging Association
FAA Certified Private Pilot

Burlington Northern/Santa Fe Railroad
(Certified Institute Safety Trainer)
Claims Avoidance, The Cambridge
American Arbitration Seminar

ERIC REICHELT, PE, Project Sponsor

SKILLS SUMMARY Mr. Reichelt has over 32 years experience in estimating and managing heavy civil and marine projects up to \$380 Million in value. In over ten years as an owner and principal estimator for Hurlen Construction/American Civil Constructors, he estimated over 2,000 marine, bridge and foundation projects. He successfully bid and managed six design-build projects. Many of the marine projects involved the construction, repair or modification of marina facilities throughout Alaska and the Pacific Northwest.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2008 - Present

Principal/Executive Vice-President/Chief Estimator

Seattle, WA

- 2009: \$116,180, US 97 Blewett Pass Vacinity Emergency Flood Repair Stage 3, Pipkin Construction, Kittitas County, WA
- 2009: \$104,000, Snohomish County Various Locations, Snohomish County, Snohomish County, WA
- 2009: \$475,000, Olympia City Hall, Hoffman Construction Company, Olympia, WA
Drove test piles including PDA testing and restrikes, installed precast piles and offloaded and stored piles at the Olympia City Hall job site.
- 2009: \$640,000, 1-5/SR 16 Westbound Nalley Valley I/C, Guy F. Atkinson Construction, Nalley Valley, WA
Furnished and drove steel test pile, furnished ST piling, drove ST pile and furnished steel pile tip.
- 2009: \$467,000, Pine Lake Phase II Dock Construction, City of Sammamish Department of Parks and Recreation, Sammamish, WA
Constructed 16-ft wide float sections with DF decking. Constructed 12-ft wide float sections with thru-flow DF decking. Drove test piles, constructed gangway and constructed pier structures.
- 2009: \$274,000, SeaTac Duck Ponds, Seattle, WA
- 2008-2009: \$14,100,000, Dakota Creek Shipyard Redevelopment, Dakota Creek Industries, Anacortes, WA
Major redevelopment and expansion of the Dakota Creek Industries (DCI) Shipyard. During Phase I, demolished and removed 24,000 sq feet of timber dock, 1,000 creosote treated piles, 250 feet of abandoned marine railway, buildings and utilities. Dredging and excavation activities involved dense, difficult and contaminated materials. Dredged more than 30,000 cubic yards of contaminated material using an environmental-sealed bucket, placed material on flat decks and transported for disposal at an upland disposal site. 105,000 cubic yards of non-contaminated material dredged utilizing custom bucket configurations with a jet-probe to loosen material. Constructed thirteen circular sheet-pile open cells to be back filled for additional dock space. An innovative 450-long OPEN CELL bulkhead with heavy-load capacity and up to 49 feet of vertical face was used. Over two acres of upland development including a state-of-the art two-stage stormwater treatment system with new outfall was developed as well as two deep water berths. Shipyard structures were relocated and rip rap slope protection placed. Phase II consisted of constructing a 370-ft long heavy-load pier utilizing SPIN FIN pile technology and a ballast deck system and completion of uplands. Central pier was designed to handle a 275-ton crane with a 220-ft boom.
- 2008-2009: \$121,000, 10th Street Marine Park Shore Protection Project, Port of Everett, Everett, WA
Installed 80-ft gangway and floatation billets. Installed gangway concrete abutment and approach slab and handrail.
- 2008: \$428,888, Fairweather Place Steel Sheet Pile Wall, Town of Hunts Point, Hunts Point, WA
Provided and installed 210 linear feet of new steel sheet pile wall of minimum 45-ft depth along the margin of Haug Channel. Included the protection of existing improvements and utilities, drainage improvements, site restoration and other work.
- 2008: \$160,000, Wiley Slough Estuary Restoration Phase I, Northwest Construction, Conway, WA
Furnished and installed permanent sheet for cut-off wall. Furnished, installed and removed two temporary sheet pile cut-off walls approximately 46 feet long upstream and downstream of the dike pipe crossing.
- 2008: \$350,000 Barker Creek Culvert Replacement Project, McDonald & Company Silverdale, WA
Furnished, installed and removed sheet pile shoring.

Principal/Vice-President/Chief Estimator*Seattle, WA*

- 2005: \$31,500,000, Marina Construction – Shilshole Bay Marina, Seattle, WA
Replaced all floats and creosote treated piling. Removed offsite and disposed of approximately 200,000 sq feet of modular concrete floats and all associated appurtenances, 1,274 creosote treated piling and demolished old fuel pier; 13,000 sq feet concrete decked dock on timber framing. Installed approximately 247,420 sq feet of new monolithic concrete floats, 64 galvanized steel piling, 12 new concrete access piers precast on site, 15 aluminum gangways, 3 new jib cranes for sail boat launching, and built 2 small cast-in-place piers approximately 1,633 sq feet. Relocated existing 5,859 sq ft fuel float with fuel lines, pumps, and building to a new location and dredged approximately 580 cubic yards of material immediately adjacent to and under floats in danger of grounding at low tide installing approximately 209 cubic yards of quarry spalls at dredged locations.
- 2004-2005: \$10,400,000, Friday Harbor Ferry Terminal Preservation, Washington State Ferries, Friday Harbor, WA
Removal of existing tie-up slip, construction of a temporary loading span, replacement and upgrade of the existing bridge span and construction of a new tie-up slip. Construction of new restroom building and expansion of terminal building were included in the project.
- 2003-2004: \$8,600,000, Lockheed Shipyard Remediation, Lockheed, Seattle, WA
Dredged and disposed of heavy metal contaminated soils including debris, removed thousands of creosote treated wooden pile, demolished 30,000 sq feet of creosote timber docks and recycled wood, concrete, concrete with rebar and steel. Major components of RA included replacing the existing deteriorated bulkhead wall, removal of all existing pier structures including timber piling and portions of the existing shipway structures from aquatic areas of the site while maintaining stability, dredging contaminated sediments from the channel and slope areas, designing the dredge prisms, performing post-dredge sediment verification sampling and analysis, construction of on-site mitigation area, creating intertidal habitat with clean soil and capping the slope area. All work had to be performed within the highest environmental standards to avoid spreading contamination.
- 2003-2004: \$5,075,982, Jacobsen Dock Cruise Ship Pier, SE, Juneau, AK
Designed and constructed a cruise ship pier in Juneau. Involved pile driving 143 each 36-in and 24-in diameter steel piles using a floating derrick barge. Pile length varied from 120 to 320 feet. The pile were pitched using an APE 200 Vibro-hammer and driven to bearing capacity using an ICE 180 or an ICE 120-S diesel hammer depending upon location. All the steel piles and structural steel was transported to Alaska on our barges. Fast tracking the project demanded intense materials control to ensure on-time completion. Project was completed two weeks early.
- 2003: \$6,500,000, Ferry Terminal, Washington Ferry System, Shaw Island, WA
- 2002: \$5,700,000, Terminal Repair, Port of Seattle, Seattle, WA

HURLEN CONSTRUCTION COMPANY, INC.

1995 – 2002

Principal/Estimator

Seattle, WA

- 2000: \$6,200,000, Pier Construction, Washington State Ferry, Bremerton, WA
- 1997-1999: \$6,075,000, Bremerton Ferry Terminal – Passenger Overhead Loading, Washington State Ferries, Bremerton, WA

Built structure to replace an existing passenger-overhead loading system that had deteriorated and was capable of only servicing one of the two slips at Bremerton. Included demolition of an existing overhead loading facility, installation of four 6-ft and one 10-ft diameter caissons with cast-in-place concrete columns built atop them. Fabrication and installation of a 140-ft long by 20-ft wide structural steel loading gangway that weighed 100 tons. A 165-ton Derrick Barge lifted the span into place. Hydraulically powered elevator using housings were installed in the largest caisson to provide a 25-ft vertical lifting assemble for raising and lowering the gangway. A complete upgrade of the terminal electrical system was made during this project. Challenges involved construction phasing to allow 24 hour operational status of the state ferries and excavation of the offshore caissons to a depth of 45 feet below the sea floor. A suction dredge was used during excavation and the use of silt curtains and debris booms contained silt preventing environmental problems.

GENERAL CONSTRUCTION CO., INC.

1988-1995

Project Manager/Project Sponsor

Seattle, WA

- 1991-1993: \$88,000,000, Lacey V. Murrow Floating Bridge Replacement, Port of Seattle, Seattle, WA
Rebuilt and installed pontoons and anchors to replace the 1.5 mile long existing floating bridge structure that sunk in 1991. Comprised of 20 floating concrete pontoons, the bridge is moored by 56 concrete gravity and fluke anchors weighing over 300 tons. Over 70,000 cubic yards of post-tensioned, high-strength micro silica concrete was poured with a complex external vibration system to ensure consolidation. Project included 9,500 tons of reinforced steel, 32,500 lineal feet of anchor cable and 1,700 tons of structural steel installation. The project was complete 365 days ahead of schedule largely due to strong partnering relationships and was featured in the May 31, 1993 edition of Engineering News Record magazine. The construction team received an AGC Construction Excellence Award and Homer Hadley Partner Award for the project.
- 1989-1992: \$57,000,000, Everett Homeport Carrier Pier, US Navy, Everett, WA
Construction of a 126-ft by 1,680-ft homeport pier to support moorage and berthing operations for aircraft carriers and support vessels using pre-stressed concrete piles, cap pier caps and pre-stressed concrete deck panels. 24 inch hollow concrete piles were produced and driven in lengths up to 194 feet without splicing. 144-ft by 470-ft wharf was constructed along with 900 feet of cast-in-place utility vault incorporated into the main pier. Include 1,000,000 yards of dredging, 45,000 tons of riprap, 500 20-in diameter solid pre-stressed concrete piles and 1,200 24-in diameter pre-stressed concrete piles. 20,000 yards of cast-in-place concrete and 4,000 cubic yards of paving was placed.

S.J. Groves

1984 - 1988

Project Manager/Project Engineer

Minneapolis, MN

- 1985: \$380,000,000, Lock & Dam, US Corp of Engineers, St. Louis, MI

EDUCATION

B.S. in Civil Engineering, United States Military, West Point, NY

M.S in Civil Engineering, Specializing in Geo-Tech Engineering, Purdue University,
West Lafayette, IN

Training & Accreditations:

Registered Professional Engineer



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CHRIS WILLIS, Project Sponsor

SKILLS SUMMARY Mr. Willis has over 25 years experience in the construction industry. Chris worked with international construction companies as a project manager and estimator in heavy-marine and heavy-construction. Chris is experienced using HCSS estimating software as well as Primavera and MS Project scheduling software. He has advanced working knowledge of the design and construction of various heavy civil and marine construction projects.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2008 - Present

Principal/Chief Estimator

Seattle, WA

- 2010-2011: \$28,000,000, Design-Build Services, Carl E Moses Small Boat Harbor, City of Unalaska, Unalaska, AK
Selected by the City of Unalaska to provide design-build services for the construction of the Carl E Moses Small Boat Harbor. Project involves the fabrication and installation of hot-dip galvanized steel floats with grating. Floats sit on fastened steel pontoons for ease of access and repairs. Floats are anchored using robust pile system utilizing moment frames to support specific load requirements. The new boat harbor will be able to accommodate vessels ranging from 60' to 150' in length. Also includes new harbor masters building and waste-oil building. Due to the remoteness of the location, careful scheduling and materials controls are in place throughout the project.
- 2009-2010: \$11,600,000, Former Scott Paper Mill Cleanup Phase II, Port of Anacortes, Anacortes, WA
Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark. Phase II involved both water-based dredging and upland excavation of contaminated soils, removing existing revetment structures and construction of new structures, installation of new small boat facility and installation of an offload apron on an existing pier. Project also involved improvements to existing pier facility, removal of existing timber-based breakwater and construction of two new attenuator structures.
- 2009-2010: \$9,600,000, Design-Build Services, Hebgen Dam Cellular Cofferdam, PPL Montana, LLC, West Yellowstone, MT
Designed a free-standing cellular cofferdam structure to provide the means to regulate flow through the Dam's intake in the event additional stop-log distress occurs. Also provided the means to dewater the inflow face of the intake structure in order for the structural repairs and seismic upgrade to be performed. Proposed structure was a freestanding cellular cofferdam constructed of interlocking flat web steel sheet piles filled with granular backfill material forming a traditional arrangement of 2 circular cells and an interior radial connecting cell. The top of structure is at elevation 6,540' and bottom of structure is founded on existing bedrock. Circular cells will be approximately 58' in diameter and spaced at approximately 70' from center. Sheet pile length 85' and maximum 90'.
- 2009: \$1,600,000, Marine Terminal Berths 2 and 3 Interim Action Dredging, Port of Olympia, Seattle, WA
Maintenance dredging of 9,700 cubic yards of contaminated material along the port facility pier. The dredge sediment was then transported by rail to landfill and a thin sand layer was placed through the dredge prism to prevent cross contamination.
- 2009: \$3,300,000, Small Boat Harbor Entrance Surge Protection, Municipality of Skagway, Skagway, AK
Built wave barrier wall to protect the harbor from swells. Involved king pile, spin fin piling and sheet pile. Built promenade on top of wall. Surveying was a challenging component with arc wall. Pile driving, fabrication, surveying and welding were required for the project.

- 2008-2010: \$7,500,000, Sandpoint North & South (Sand Creek Byway), Parsons Corporation / RCI, Sandpoint, ID
Installed temporary sheet pile crane pads piers 1, 2, and 3, drove test piles, drove pile, SP bridge pile restrike, installed bridge temporary access, drove sheet pile for cofferdams. Unloaded the pipe and sheet pile at point of installation. Drove, spliced, and cut-off test and production piles and permanent sheet piles. Installed, removed, and preloaded all temporary sheet piles. Designed, furnished, installed, and removed a 30 foot by 300 foot work bridge.
- 2008-2009: \$14,100,000, Dakota Creek Shipyard Redevelopment, Dakota Creek Industries, Anacortes, WA
Major redevelopment and expansion of the Dakota Creek Industries (DCI) Shipyard. During Phase I, demolished and removed 24,000 square feet of timber dock, 1,000 creosote treated piles, 250 feet of abandoned marine railway, buildings and utilities. Dredging and excavation activities involved dense, difficult and contaminated materials. Dredged more than 30,000 cubic yards of contaminated material using an environmental-sealed bucket, placed material on flat decks and transported for disposal at an upland disposal site. 105,000 cubic yards of non-contaminated material dredged utilizing custom bucket configurations with a jet-probe to loosen material. Constructed thirteen circular sheet-pile open cells to be back filled for additional dock space. An innovative 450-long OPEN CELL bulkhead with heavy-load capacity and up to 49 feet of vertical face was used. Over two acres of upland development including a state-of-the-art two-stage stormwater treatment system with new outfall was developed as well as two deep water berths. Shipyard structures were relocated and rip rap slope protection placed. Phase II consisted of constructing a 370-foot long heavy-load pier utilizing SPIN FIN pile technology and a ballast deck system and completion of uplands. Central pier was designed to handle a 275 ton crane with a 220 foot boom.
- 2008-2009: \$10,400,000, St. Herman Harbor Boat Lift Facility, City of Kodiak, Kodiak, AK
Constructed new boat lift piers consisting of steel pipe piles, composite steel and concrete deck girders, and concrete backwall. Constructed dolphins consisting of steel pipe piles, rock anchors, steel pile cap, and fenders. Installed prefabricated catwalks.

AMERICAN CIVIL CONSTRUCTORS, INC.

2002 - 2007

Estimator

Seattle, WA

- 2006-2007: \$34,000,000, Ketchikan Berth 3 Reconfiguration, City of Ketchikan, Ketchikan AK
Consisted of constructing 21,000 square feet of pile-supported dock with drilled pile-to-bedrock anchored connections, 5 deepwater 48-inch diameter steel pipe pile dolphins with drilled and pinned pile to bedrock connections and 18,000 square feet hardwood decked promenade as well as installing 26,000 square feet of monolithic concrete floats held in place by socketed piling, and a 15,000 square feet floating dock accessed by a 130-foot long transfer span.
- 2006: \$10,200,000, Campbell River Cruise Ship Terminal, Campbell River Indian Band, Campbell River, BC, Canada
Construction of a multipurpose dock to serve as a landing platform for passengers access between ship and shore. Consisted of 750-ton concrete pontoon linked to a shore by a 140 foot long gangway and 200 foot ling trestle. The facility spans 1,400 feet off shoreline. 164 pilings were installed under eight mooring and berthing dolphins. Construction was conducted under extreme conditions, including high winds, tides, and fast currents. Anchoring barges and derricks became a key factor in maintaining maritime and employee safety while constructing the terminal.
- 2006: \$750,000, Terminal 91 Berths H, I, J Fender Replacement, Port of Seattle, Seattle, WA
Demolition of 1000 feet of timber fender system, driving 100 new fender pile and installation of 33 new steel fender panels were all accomplished while accommodating tenant needs at an active Port of Seattle Terminal.
- 2004-2005: \$7,000,000, Whittier Ferry Terminal Improvement Project, AK DOT, Whittier, AK
After demolishing the existing terminal, 18,000 cubic yards of material was dredged to accommodate deeper draft vessels. The new terminal consisted of seven driven pile dolphins, transfer span upgrades, and a new terminal building. 8 weeks before the scheduled terminal opening, a 75-year storm event caused nearly \$1,000,000 in damage to the facility and the contractor's equipment. The contractor accelerated their schedule, mobilized new materials from Tacoma, WA, and completed the terminal on time.



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- 2004-2005: \$5,100,000, Adak Small Boat Harbor, City of Adak, Adak, AK
Construction of an open cell sheet pile wall with excavation and dredging to form a new small boat harbor. Due to environmental reasons and permitting restrictions, the project had to be completed during the winter months. Involved massive mobilization of construction, quarrying and rock blasting equipment and transfer of all material from Seattle to the island via tug and barge. The tow to the island took four weeks. In order to produce necessary riprap materials, blasting and development of a quarry commenced upon arrival. A 100-ton crawler crane, part of the mobilization, was used to install sheet piling. After sheet piling was completed, dredging to deepen the harbor started with riprap placement on the slopes.
- 2004: \$1,800,000, Terminal 18 Fender System Replacement & Berth 5 Deepening, Port of Seattle, Seattle, WA
After installing 1000 lineal feet of underwater sheet pile bulkhead, sediments were precision dredged from between the pier piling to prevent slope failure and material sloughage into the deep draft slip. Once the slope sediments were removed, 50 new fender piles were driven and a new fender system was constructed. Dredging and fender system upgrades were all performed without impacting the movement of ships and containers in the active container handling facility.
- 2003-2005: \$6,000,000, Pacific Sound Resources (PSR) Remedial Action, Seattle, WA
Dredged and capped the offshore areas of the old Pacific Sound Resources Site in Elliot Bay. PSR engaged in the business of timber treatment at their West Seattle plant, which expelled harmful chemicals into the waters of Puget Sound for decades. Shortly after the EPA shut PSR down, the location was deemed a Superfund Site. During the project, the biggest challenge was setting up survey controls to meet the extremely tight tolerances required of the owner. Differential GPS was used in conjunction with boom angle indicators and electronic tide gauges to ensure the Derrick Barge placed a sediment cap to a tolerance of inches. Monitoring the capping progress was performed using a hydrographic survey boat yielding data used to create contour maps, cross sections and volume calculations on a daily basis. During this project the successful partnering with the government on some Value Engineering proposals was accomplished saving tax payers more than \$2,400,000.
- 2003-2004: \$8,600,000, Lockheed Shipyard Remediation, Lockheed, Seattle, WA
Dredged and disposed of heavy metal contaminated soils including debris, removal of thousands of creosote treated wooden pile, demolition of 30,000 square feet of creosote timber docks and the recycling of wood, concrete, concrete with rebar and steel. The major components of RA included replacing the existing deteriorated bulkhead wall, removal of all existing pier structures including timber piling and portions of the existing shipway structures from aquatic areas of the site while maintaining stability, dredge contaminated sediments from the channel and slope areas, design the dredge prisms, perform post-dredge sediment verification sampling and analysis, construct on-site mitigation area, create intertidal habitat with clean soil, and cap the slope area. All work had to be performed within the highest environmental standards to avoid spreading contamination.
- 2003-2004: \$5,075,982, Jacobsen Dock Cruise Ship Pier, SE, Juneau, AK
Designed and constructed a cruise ship pier in Juneau. Involved pile driving 143 each 36" and 24" diameter steel piles using a floating derrick barge. Pile length varied from 120 to 320 feet. The pile were pitched using an APE 200 Vibro-hammer and driven to bearing capacity using an ICE 180 or an ICE 120-S diesel hammer depending upon location. All the steel piles and structural steel was transported to Alaska on our barges. Fast tracking the project demanded intense materials control to ensure on-time completion. Project was completed two weeks early.

RCI CONSTRUCTION INC.

2001 - 2002

Estimator

Sumner, WA

BRADBURY STAMM CONSTRUCTION, INC.

1997 - 2001

Estimator

Albuquerque, NM



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CCI CONSTRUCTION INC.

1993 - 1997

Estimator

Albuquerque, NM

BALFOUR BEATTY CONSTRUCTION

1979 - 1993

Estimator

London, England

EDUCATION

Higher Nation Degree Civil Engineering, 1979

Training & Accreditations:

HCSS Heavy Bid Training

Primavera SureTrak Training

MICHAEL MANSFIELD, Project Sponsor

SKILLS SUMMARY Mr. Mansfield has almost 30 years of tax and business consulting experience. He spent 16 years with Deloitte & Touche before joining Moss Adams in 1995. He was a partner with Moss Adams for more than 10 years. During his time there he served as the lead of the Business Owner Succession Services Practice in the Seattle office and served as a member of the firm's Tax Committee. He provided taxation, business and financial accounting services to a variety of clients in the real estate and construction, manufacturing/distribution and financial services industries. He provided significant ownership transition and estate planning advice for his clients. His experience also includes significant consulting with closely-held corporations including form of entity issues, structural tax planning, designing strategies to maximize shareholder value, personal financial planning and compensation planning.



EMPLOYMENT

PACIFIC PILE & MARINE, LP
Principal/Executive Treasurer
Seattle, WA

2008 - Present

MOSS ADAMS
Partner
Seattle, WA

1995 - 2008

DELOITTE & TOUCHE
Certified Public Accountant
Seattle, WA

1979 – 1995

PROFESSIONAL AFFILIATIONS

- Washington State Society of Certified Public Accountants
- American Institute of Certified Public Accountants
- Construction Financial Managers Association

EDUCATION

B.A. Accounting, Finance, Economics and General Business, Carrol College, Helena, MT
M.S. Taxation, Golden Gate University, San Francisco, CA
Training & Accreditations:
Certified First Aid and CPR

JASON DAVIS, Division/Project Manager

SKILLS SUMMARY Mr. Davis's management role on increasingly difficult marine and heavy civil construction projects has led him throughout remote Alaska, the Aleutian Chain and the Pacific Northwest including a \$27 million design-build large diameter deep water HDPE outfall project and a \$37 million deep water cruise ship facility requiring several types of drilled rock anchors, both completed on time despite extremely tough schedule challenges. Mr. Davis's experience provides the unique cross-section of skills needed to successfully deliver difficult projects. The experience gained working in environmentally sensitive areas and remote Alaskan locations have furthered his ability to construct projects in a clean, safe and responsible manner.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2008 - Present

Project Manager

Seattle, WA

- 2010: \$Private Owner, Shell Offshore Mooring Dolphins, Offshore Systems, Inc., Unalaska, AK
Constructed a marine berth for the 265-ft diameter offshore drilling vessel Kulluk. The rig is currently under contract to the Shell Exploration and Production company to undergo a retrofit and is intended act as a relief well drilling rig in the Beaufort Sea. The berth consisted of four offshore breasting dolphins in combination with eight upland mooring arrangements. Construction activities included driving 35 offshore and upland piling, rock drilling, concrete filled piling, welding and steel fabrication. Pacific Pile & Marine also played a large role in the mooring process when the rig was moved into its berth. Crew worked in adverse weather to construct drilling platforms for Kulluk. Kulluk Mooring Facility is being constructed to prepare Shell for any oil response in relation to its Beaufort Sea operations. This was a unique project with an accelerated schedule in a harsh weather environment.
- 2010-2011: \$30,500,000, Design-Build Services, Carl E. Moses Small Boat Harbor, City of Unalaska, Unalaska, AK
Selected by the City of Unalaska to provide design-build services for the construction of the Carl E. Moses Small Boat Harbor. Project involves the fabrication and installation of hot-dip galvanized steel floats with grating. Floats sit on fastened steel pontoons for ease of access and repairs. Floats are anchored using robust pile system utilizing moment frames to support specific load requirements. The new boat harbor will be able to accommodate vessels ranging from 60 to 150-ft. in length. Also includes new harbor masters building and waste-oil building. Due to the remoteness of the location, careful scheduling and materials controls are in place throughout the project.
- 2009-2010: \$9,600,000, Design-Build Services, Hebgen Dam Cellular Cofferdam, PPL Montana, LLC, West Yellowstone, MT
Designed a free-standing cellular cofferdam structure to provide the means to regulate flow through the Dam's intake in the event additional stop-log distress occurs. Also provided the means to dewater the inflow face of the intake structure in order for the structural repairs and seismic upgrade to be performed. Proposed structure was a freestanding cellular cofferdam constructed of interlocking flat web steel sheet piles filled with granular backfill material forming a traditional arrangement of 2 circular cells and an interior radial connecting cell. The top of structure is at elevation 6,540 feet and bottom of structure is founded on existing bedrock. Circular cells will be approximately 58 feet in diameter and spaced approximately 70 feet from center with a sheet pile length 85-ft. and maximum 90-ft.
- 2009: \$346,000, Kodiak Repair Cargo Wharf Fender System, US Coast Guard Kodiak, Kodiak, AK
Repaired fender system at pier 2.
- 2009: \$255,000, False Pass Harbor Construction, Lash Corporation, False Pass, AK
Assisted with construction of breakwater and constructed boat harbor.
- 2009: \$3,300,000, Small Boat Harbor Entrance Surge Protection, Municipality of Skagway, Skagway, AK
Built wave barrier wall to protect the harbor from swells. Involved king pile, spin fin piling and sheet pile. Built promenade on top of wall. Surveying was a challenging component with arc wall. Pile driving, fabrication, surveying and welding were required for the project.



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- 2008-2009: \$10,400,000, St. Herman Harbor Boat Lift Facility, City of Kodiak, Kodiak, AK
Constructed new boat lift piers consisting of steel pipe piles, composite steel and concrete deck girders, and concrete backwall. Constructed dolphins consisting of steel pipe piles, rock anchors, steel pile cap, and fenders. Installed prefabricated catwalks.

TRITON MARINE CONSTRUCTION

2007 - 2008

Project Engineer, Environmental Permit Lead

Bremerton, WA

- 2008: \$28,000,000, Design-Build Services, Brightwater Marine Outfall, Brightwater, Shoreline, WA
Marine outfall designed to discharge effluent (treated wastewater) from the Brightwater treatment plant into Puget Sound. Triton Marine installed a 400-ft. long 84-in diameter steel marine outfall connector pipe along the tidal beach line to a massive driven pile underwater marine anchor. From the anchor tie in location, twin 63-in. diameter, 1-mile long HDPE outfall pipes were deployed using the controlled submergence method to depths exceeding 600 feet. Hydrocarbon contamination discovered in the tidal zone required innovative containment measures and implementation of an on-site water treatment process. This design build project was completed nearly two years ahead of schedule. The design builder received bonuses for excellent environmental steward ship and maintaining a superb safety record.

AMERICAN CIVIL CONSTRUCTORS, INC.

2003 - 2007

Project Engineer/Manager

Seattle, WA

- 2006-2007: \$34,000,000, Ketchikan Berth 3 Reconfiguration, City of Ketchikan, Ketchikan AK
Consisted of constructing 21,000 square feet of pile-supported dock with drilled pile-to-bedrock anchored connections, 5 deepwater 48-in. diameter steel pipe pile dolphins with drilled and pinned pile to bedrock connections and 18,000 square feet hardwood decked promenade as well as installing 26,000 square feet of monolithic concrete floats held in place by socketed piling and a 15,000 square feet floating dock accessed by a 130-ft. long transfer span.
- 2006: \$750,000, Terminal 91 Berths H, I, J Fender Replacement, Port of Seattle, Seattle, WA
Demolition of 1000 feet of timber fender system, driving 100 new fender pile and installation of 33 new steel fender panels were all accomplished while accommodating tenant needs at an active Port of Seattle Terminal.
- 2005-2006: \$3,000,000, Indian Island Pile Repair , Indian Island, WA
The pile repairs at Indian Island required driving concrete pile through holes cut in an active high security military pier and steel pile through an active ammunition storage building. After the new piles were driven, suspended formwork was installed and concrete grade beams retrofitted to support the pier structure.
- 2004-2005: \$7,000,000, Whittier Ferry Terminal Improvement Project, AK DOT, Whittier, AK
After demolishing the existing terminal, 18,000 cubic yards of material was dredged to accommodate deeper draft vessels. Then new terminal consisted of seven driven pile dolphins, transfer span upgrades and a new terminal building. 8 weeks before the scheduled terminal opening, a 75-year storm event caused nearly \$1,000,000 in damage to the facility and the contractor's equipment. The contractor accelerated their schedule, mobilized new materials from Tacoma, WA and completed the terminal on time.
- 2004: \$1,800,000, Terminal 18 Fender System Replacement & Berth 5 Deepening, Port of Seattle, Seattle, WA
After installing 1000 linear feet of underwater sheet pile bulkhead, sediments were precision dredged from between the pier piling to prevent slope failure and material sloughage into the deep draft slip. Once the slope sediments were removed, 50 new fender piles were driven and a new fender system was constructed. Dredging and fender system upgrades were all performed without impacting the movement of ships and containers in the active container handling facility.
- 2003-2005: \$6,100,00, Fishermen's Terminal South Wall Repair, Port of Seattle, Seattle, WA
The Fishermen's Terminal facility was actively operating throughout the demolition of an underwater timber relieving platform and the construction of a new steel pile supported pier. Careful coordination was required to mitigate impacts to the restaurants, offices, and other tenants at the terminal.



- 2003-2004: \$8,600,000, Lockheed Shipyard Remediation, Lockheed, Seattle, WA
Dredged and disposed of heavy metal contaminated soils including debris, removal of thousands of creosote treated wooden pile, demolition of 30,000 square feet of creosote timber docks and the recycling of wood, concrete, concrete with rebar and steel. The major components of RA included replacing the existing deteriorated bulkhead wall, removal of all existing pier structures including timber piling and portions of the existing shipway structures from aquatic areas of the site while maintaining stability, dredge contaminated sediments from the channel and slope areas, design the dredge prisms, perform post-dredge sediment verification sampling and analysis, construct on-site mitigation area, create intertidal habitat with clean soil, and cap the slope area. All work had to be performed within the highest environmental standards to avoid spreading contamination.
- 2003-2004: \$3,000,000, Fishermen's Terminal Docks 3 and 4, Port of Seattle, Seattle, WA
Constructing over 40,000 square feet of timber docks complete with new mechanical and electrical systems.

EDUCATION

B.S. Construction Engineering, Montana State University, Billings, MT
M.S. Construction Management, Montana State University, Billings, MT

Training & Accreditations:

Certified First Aid and CPR
Engineer in Training
Certified OSHA 10-Hour
Forklift Certification

Contractor Safety Training Orientation
Program
Hazardous Material Trained

GREG ANDERES, Project Manager

SKILLS SUMMARY Mr. Anderes has 13 years of construction project experience including surveying, environmental concerns and project engineering. He gained invaluable experience working on out fall projects giving him distinct qualifications for working environmental dredging projects. He has a firm construction foundation permitting him to perform many aspects of project operations such as directing skilled craftsmen and survey crews and coordinating subcontractors. He has supervised project engineering staff, project superintendents and project office staff. His specialties are heavy lift, rock drilling and dredging. His responsibilities include management of jobsite operations, financial performance and reporting, site safety programs, materials procurement, owner relations and scheduling.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2008 - Present

Project Manager

Seattle, WA

- 2009-2010: \$11,600,000 Former Scott Paper Mill Cleanup Phase II, Port of Anacortes, Anacortes, WA
Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark. Phase II involved both water-based dredging and upland excavation of contaminated soils, removing existing revetment structures and construction of new structures, installation of new small boat facility and installation of an offload apron on an existing pier. Project also involved improvements to existing pier facility, removal of existing timber-based breakwater and construction of two new attenuator structures.
- 2008: \$1,600,000, Marine Terminal Berths 2 and 3 Interim Action Dredging, Port of Olympia, Seattle, WA
Maintenance dredging of 9,700 cubic yards of contaminated material along the port facility pier. The dredge sediment was then transported by rail to landfill and a thin sand layer was placed through the dredge prism to prevent cross contamination.
- 2008: \$430,000, Des Moines Marina Maintenance, City of Des Moines, Des Moines, WA
Dredged boat ramp area, south outfall, and north outfall. Removed and offloaded pile. Dredged suitable sediments in the entrance channel in the marina interior with disposal at the DMMP open-water disposal site.
- 2008: \$1,900,000, Lake Washington Dry Dock Removal, Washington State Department of Natural Resources, Seattle, WA
Consisted of the deconstruction of two derelict dry docks sunken in 25 feet of water and resting on the sediment surface on southern Lake Washington adjacent to the city of Renton. The dry docks were too damaged to be easily raised from their sunken state. The dry docks were deconstructed in-water while being enclosed in a full depth, anchored turbidity curtain. Special precautions were needed as to not disturb the site as it is a contaminated superfund site. The debris generated was loaded onto barges and sent to an appropriate disposal site. The project called for confined space diving and suction dredging of the sediment from the barges ballast tanks.

TRITON MARINE CONSTRUCTION

2007 - 2008

Project Engineer, Surveyor

Bremerton, WA

- 2008: \$28,000,000, Design-Build Services, Brightwater Marine Outfall, Brightwater, Shoreline, WA
Marine outfall designed to discharge effluent (treated wastewater) from the Brightwater treatment plant into Puget Sound. Triton Marine installed a 400 foot long 84" diameter steel marine outfall connector pipe along the tidal beach line to a massive driven pile underwater marine anchor. From the anchor tie in location, twin 63" diameter, 1-mile long HDPE outfall pipes were deployed using the controlled submergence method to depths exceeding 600 feet. Hydrocarbon contamination discovered in the tidal zone required innovative containment measures and implementation of an on-site water treatment process. This design build project was completed nearly two years ahead of schedule. The design builder received bonuses for excellent environmental stewardship and maintaining a superb safety record.



Project Engineer/Manager*Seattle, WA*

- 2007-2008: \$3,000,000, Denny Way CSO Seattle, W Dredging/Capping, Seattle, WA
Mechanical dredging of 17,000 cubic yards of contaminated sediments located in Elliot Bay just offshore from Denny Way. Historically untreated sewage had been released at this site and previous attempts to clean up or seal the contamination had failed. Using mechanical means, the crew dredged the 17,000 cubic yards of material and transported it to upland disposal. Clean material was then imported and placed to restore the site to its original contours.
- 2007: \$1,250,000, Fidalgo Bay Mitigation Project, Port of Anacortes, Anacortes, WA
A Hitachi 800 hydraulic excavator mounted on a barge was used to dredge approximately 60,000 cubic yards of silty sand material from the Swinomish Channel near Anacortes, Washington. The sand was then deposited in Fidalgo Bay in order to raise the grade of the bay and create a habitat for eelgrass. Fast moving currents and poor weather created challenges for the crew, but they were able to complete the project on time and under budget.
- 2007 \$500,000, City of Snohomish Waste Water Treatment Plant Outfall Extension, Snohomish, WA
- 2006: \$500,000, Barbee Mill Shoreline Restoration, Barbee Mill, WA
- 2006: \$1,600,000, Tenakee Springs Seaplane Float Replacement, Tenakee Springs, AK
Replacement of two wooden seaplane floats including associated gangways, utilities, and rock anchored steel pile dolphins. 9 of the 24" pile required drilling 20' beyond tip elevation, then installation of a steel rod and grouting in place. Existing structures were demolished, aluminum gangways and wooden floats were installed, steel pile dolphins were anchored, and existing facilities were refurbished.
- 2005: \$3,000,000, Broadway Dock Expansion Project, Skagway, AK
- 2005: \$500,000, Bangor Delta Pier South Dredging, Bangor, WA
- 2004-2005: \$7,000,000, Whittier Ferry Terminal Improvement Project, Whittier, AK
After demolishing the existing terminal, 18,999 cubic yards of material was dredged to accommodate deeper draft vessels. The new terminal consisted of 7 driven pile dolphins, transfer span upgrades, and a new terminal building. 8 weeks before the scheduled terminal opening, a 75-year storm event caused nearly \$1,000,000 in damage to the facility and the contractor's equipment. The contractor accelerated their schedule, mobilized new materials from Tacoma, WA, and completed the terminal on time.
- 2003-2005: \$6,000,000, Pacific Sound Resources (PSR) Remedial Action, Seattle, WA
Dredged and capped the offshore areas of the old Pacific Sound Resources Site in Elliot Bay. PSR engaged in the business of timber treatment at their West Seattle plant, which expelled harmful chemicals into the waters of Puget Sound for decades. Shortly after the EPA shut PSR down, the location was deemed a Superfund Site. During the project, the biggest challenge was setting up survey controls to meet the extremely tight tolerances required of the owner. Differential GPS was used in conjunction with boom angle indicators and electronic tide gauges to ensure the Derrick Barge placed a sediment cap to a tolerance of inches. Monitoring the capping progress was performed using a hydrographic survey boat yielding data used to create contour maps, cross sections and volume calculations on a daily basis. During this project the successful partnering with the government on some Value Engineering proposals was accomplished saving tax payers more than \$2,400,000.
- 2003: \$750,000, Duwamish River Turning Basin, US Army Corps of Engineers, Seattle, WA
Involved maintenance dredging. The material was dredged, transported by barge to another offshore site and used as capping material for environmental remediation.

EDUCATION

Construction Management, University of Washington, Seattle, WA

A.S. Land Surveying, Renton Technical College, Renton, WA

Training & Accreditations:

Member, Western Dredging

Scheduling/Primavera Association

Forklift Certification

Hydropack Hydrographic Survey Software
Training

Certified Federal Highway Administrative

Field Testing for Construction Materials

Contractor Safety Training Orientation
Program

Certified OSHA 40-Hour Hazardous

Certified Industrial First Aid & CPR

Waste Operations & Emergency

Response

Class B Commercial Driver's License

STEVE SPENCER, P.E., Project Manager/Chief Engineer

SKILLS SUMMARY Mr. Spencer has 20 years experience as a geotechnical and structural engineer with diverse experience in design and construction of marine, underground and foundation projects. Mr. Spencer's work experience has been in providing consulting services to heavy civil contractors with a primary focus on marine and foundation specialty contractors. He has been providing engineering services to Pacific Pile and Marine since the company's inception. Following a 10 year professional relationship with the partners of PPM, Mr. Spencer joined the staff as the Chief Engineer focusing on Design-Build and Contractor Design Components of Bid-Build Projects. Over his career, Mr. Spencer has been the lead engineer on more than 50 marine, underground and foundation projects.



EMPLOYMENT

PACIFIC PILE & MARINE, LP

2010 - Present

Chief Engineer

Seattle, WA

GZA GEOENVIRONMENTAL, INC.

1994 - 2010

Associate Principal

Boston, MA and Seattle, WA

- 2009-2010: \$11,600,000, Former Scott Paper Mill Cleanup Phase II, Port of Anacortes, Anacortes, WA
Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark. Phase II involved both water-based dredging and upland excavation of contaminated soils, removing existing revetment structures and construction of new structures, installation of new small boat facility and installation of an offload apron on an existing pier. Project also involved improvements to existing pier facility, removal of existing timber-based breakwater and construction of two new attenuator structures. Mr. Spencer was the Engineer of Record for upland sheet pile shoring and the offload apron components of this PPM project.
- 2009-2010: \$9,600,000, Design-Build Services, Hebgen Dam Cellular Cofferdam, PPL Montana, LLC, West Yellowstone, MT
Designed a free-standing cellular cofferdam structure to provide the means to regulate flow through the Dam's intake in the event additional stop-log distress occurs. Also provided the means to dewater the inflow face of the intake structure in order for the structural repairs and seismic upgrade to be performed. Proposed structure was a freestanding cellular cofferdam constructed of interlocking flat web steel sheet piles filled with granular backfill material forming a traditional arrangement of 2 circular cells and an interior radial connecting cell. The top of structure is at elevation 6,540' and bottom of structure is founded on existing bedrock. Circular cells will be approximately 58' in diameter and spaced at approximately 70' from center. Sheet pile length 85' and maximum 90'. Mr. Spencer was the Engineer of Record for this Design-Build PPM project.
- 2009-2010: \$2,800,000, Terminal 115, Port of Seattle, Seattle, WA
Terminal 115 is a Superfund site, requiring careful environmental consideration. The purpose of this project was to build a new barge loading and unloading facility. Included sheet pile installation, upland and in-water pile driving, maintenance dredging of contaminated materials, demolition and removal of an existing wooden pier, the rebuild of two existing piers including new steel fendering system and installation of a ramp lifting mechanism. During dredging operations, PPM encountered numerous obstructions including industrial equipment intermingled with the contaminated sediment throughout the marine environment along with inconsistent client-provided survey data. PPM participated in a value-engineering review that was able to cost effectively resolve the issues. Mr. Spencer was involved in review of PPM means and methods on site to deal with the challenges presented by the unforeseen site conditions and deficient design issues allowing PPM to meet and exceed the end date under an accelerated schedule.

Project Manager, Engineer of Record, Sandpoint By-Way Project, Sandpoint, ID

Performed design of open water steel sheet pile cofferdams to allow for pile cap and pier construction below the lake water level. Bottom stability and groundwater cut-off provided by tremie seals with maximum depths of unwatered cofferdam of 24 feet. Additional project elements included, design of temporary construction trestle, cantilever sheet pile excavations, evaluation of fill placement on soft clay. This project was a PPM project.

Project Manager, Engineer of Record, Former Standard Chemical Company Site Cleanup, Washington State Department of Ecology, Tacoma, WA

Responsible for design of two sheet pile cofferdams, one land based and one water based in a tidal environment, to allow for excavation of 9000 CY of contaminated soil. The design led to significant savings for both the owner and the client over the Contract system that was originally proposed. This project was a PPM project.

Project Manager, Engineer of Record, Everett, WA

Performed geotechnical design of temporary pipe piles to support a 4000-ft long temporary construction work trestle.

Project Manager, Engineer of Record, Westfield River Bridge, Westfield, MA

Performed complete structural and geotechnical design of a 485-ft long pipe pile supported temporary construction work trestle. Work trestle loading included a 110-ton crawler crane, drilled shaft rig, concrete pump trucks and other miscellaneous construction vehicles. Performed design of one internally braced open water steel sheet pile cofferdams to allow for drilled shaft and pier construction below the water level. Bottom stability and groundwater cut-off provided by tremie seals. Performed design of temporary excavation support for abutment construction.

Project Engineer, Brightman Street Bridge, Somerset/Fall River, MA

Performed design of eight internally braced open water steel sheet pile cofferdams to allow for pile cap and pier construction below the water level. Bottom stability and groundwater cut-off provided by tremie seals. Depths of unwatered cofferdam ranged from 24 to 63 feet with tidal conditions.

Project Manager, Engineer of Record, North Fork Skagit River Bridge Scour Repair, Skagit County, WA

Performed design of two internally braced steel sheet pile cofferdams to allow for excavation and placement of scour protection material at existing pile supported bridge piers near the mouth of the North Fork Skagit River.

Project Manager, Engineer of Record, Everett Water Pollution Control Facility Expansion, Everett, WA

Performed design of three internally braced and cantilever open water steel sheet pile cofferdams to allow for excavation and unwatering for facility improvements to existing treatment ponds.

Project Engineer, First Connecticut Lake Dam, Pittsburgh, New Hampshire

Performed design for construction of an internally braced steel sheet pile cofferdam. The cofferdam allowed the contractor to unwater 43 feet for facial repairs to a dam. Prepared design calculations for construction vehicle loading of steel superstructure.

Project Manager, Deal Lake Flume Reconstruction, Asbury Park, NJ

Performed design for construction of an internally braced and cantilever steel sheet pile cofferdam. The cofferdam allowed the contractor to excavate and dewater for reconstruction of the outfall flume on an Atlantic Ocean beachfront.

Project Engineer, CA/T Contract C09A7, Boston, MA

Performed redesign of cofferdam sequence of excavation to allow for excavation of an 80-ft. by 300-ft. by 55-ft. deep excavation in the existing Fort Point Channel. Additionally, performed design of mass soil mix block and extension of reinforced concrete slurry wall T-panels to stabilize and allow for dredging adjacent to existing historical seawall without rebuilding the seawall.



Project Manager, Engineer of Record, Picnic Point Wastewater Treatment Facility, Snohomish County, WA

Performed both pre-bid and final design of earth support systems including a tieback supported secant pile system with maximum excavation depth of 30-ft. and a soil nail wall system with maximum excavation depth of 24-ft. Design and construction approach provided unique combination of dewatering, an impermeable secant pile system for the deeper excavation with water bearing silts and a soil nail wall system in competent granular soils up to 15 feet below the original site groundwater levels. Total face area of shoring was approximately 28,000 square feet.

Project Manager, Engineer of Record, Brightwater Conveyance System, Central Contract, Kenmore, WA

Performed design of 200-ft. deep final liner for freeze shaft excavation, review of freeze shaft design calculations and construction monitoring of freeze shaft. Additional project elements include design of micro-tunneling jacking pit. Shaft excavation was 46 feet deep as a self supporting circular structure. Shaft construction entails concrete secant piles with bottom stability and groundwater cut-off provided by a cast-in-place bottom seal. Excavation to be performed with temporary dewatering.

Project Manager, Engineer of Record, East Side CSO Tunnel Project, Portland, OR

Performed design of six shafts and bottom plugs to enable micro-tunneling operations. Shafts serve as both jacking and receiving pits. Shaft excavation ranges in depth from 29 feet to 55 feet. Shaft construction entails concrete secant piles with bottom stability and groundwater cut-off provided by jet grout bottom plugs. Four of the shafts are self supporting circular structures while the remainder utilize one two levels of internal bracing.

Project Manager, Engineer of Record, Multicare Expansion, Tacoma, WA

Performed design of tieback supported soldier pile and lagging earth support system, maximum excavation depth was 35 feet. Additional project elements included tiered supported soldier pile and lagging and a micro-pile and soil nail wall underpinning system.

Project Manager, Weymouth Landing Underpass and Hingham Square Underpass, MBTA Greenbush Line, Braintree, Weymouth and Hingham, MA

Responsible for design of approximately 2600 linear feet of one to two levels of internal bracing and tiebacks for slurry wall support for cut-and-cover and boat section construction at two urban sites along a proposed commuter rail line. Other duties on the project included design of earth support consisting of soldier pile and lagging with internal bracing for interface at existing sewer line and review of geotechnical instrumentation to assess the performance of the earth support system.

Project Engineer, Flushing Bay CSO Retention Facility, Contract CS4-4G, Queens, NY

Responsible for the design of 700 linear feet of soil mix wall for construction of large capacity CSO. The soil mix walls were supported by internal bracing and soil anchors to a maximum excavation depth of 32 feet. Reviewed design of internally braced sheet pile walls for similar construction. Assisted Contractor with construction sequencing and approach. Reviewed geotechnical instrumentation to assess the performance of the earth support system.

Project Engineer, CA/T Contract C01A3, Boston, MA

Prepared design for excavation support system for 1,000 linear feet of cut and cover tunnel excavation. Maximum depth of excavation was 40 feet. Earth support was provided by steel sheet pile and soldier pile and lagging systems with the use of internal and external bracing elements.

MUESER RUTLEDGE CONSULTING ENGINEERS

1990 - 1994

Design and Field Engineer

New York, NY



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EDUCATION

B.S. Civil Engineering, Ohio University, Athens, OH
M.S. Civil Engineering, Geotechnical and Structural Specialization, University of Washington, Seattle, WA
Cold Regions Engineering Short Course, University of Washington

PROFESSIONAL REGISTRATIONS

2010, Professional Engineer, Alaska, Pending Board Review on May 27, 2010.
2009, Professional Engineer, Montana, 19194 PE
2008, Professional Engineer, Idaho, 13482
2005, Professional Engineer, Hawaii, PE 11834
2003, Professional Engineer, Oregon, 73341PE
1996, Professional Engineer, Washington, 33016
1995, Professional Engineer, Massachusetts, 38807

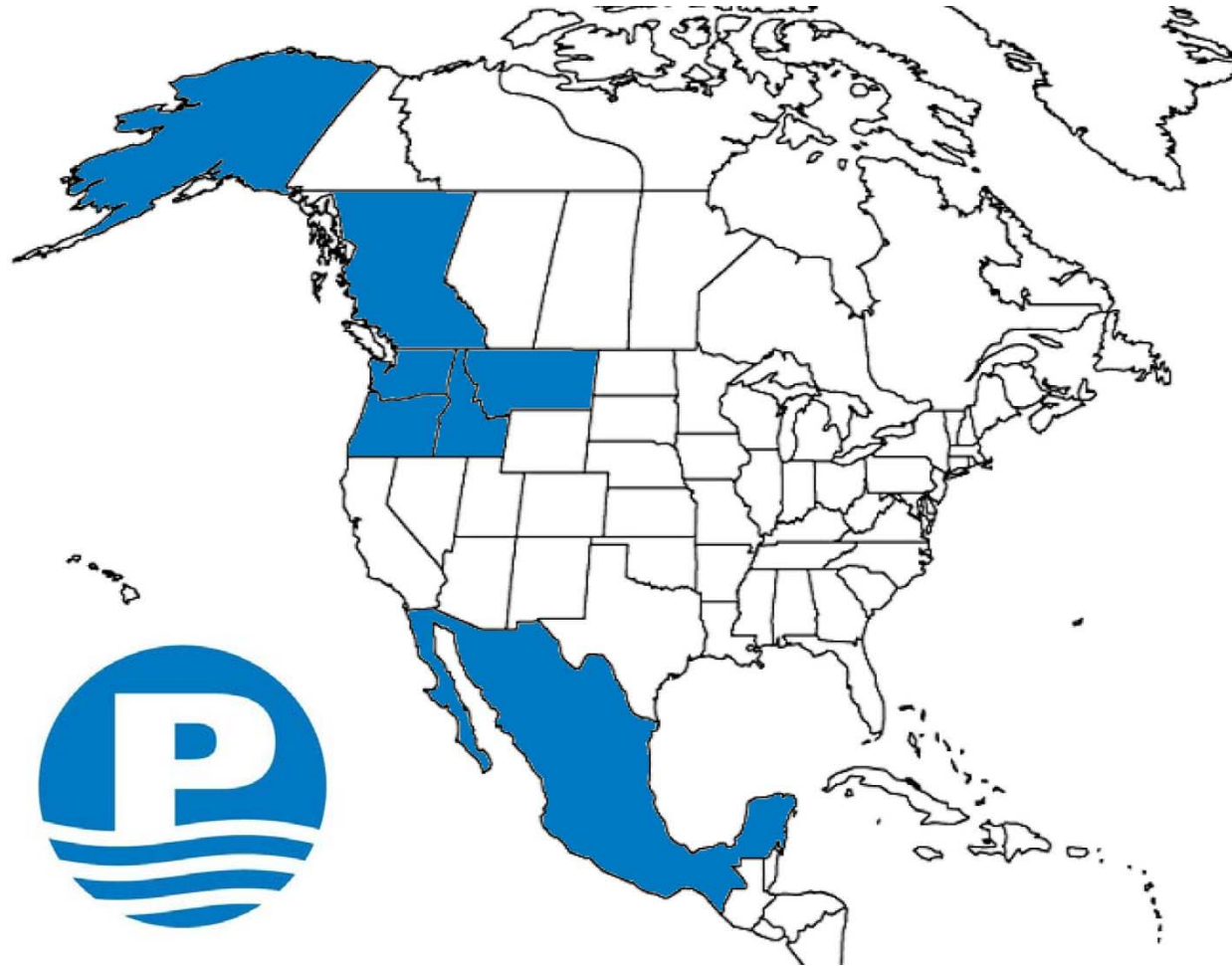
PRESENTATIONS

Spencer, S.W. "Soil Nail Wall Design and Construction," GZA Professional Practice Training Seminar, May 6, 2009.
Spencer, S.W., Haag, A "Secant Pile Shafts for CSO Construction," Annual Geotechnical Conference, GZA GeoEnvironmental, Inc., March 21, 2009.
Spencer, S.W. "Permanent Soil Nail Walls – Design and Construction, Old Colony Railroad – Greenbush Line," Annual Geotechnical Conference, GZA GeoEnvironmental, Inc., March 5, 2005.
DiFiore, S.J., Morgan, R.J., Spencer, S.W., "Pitfalls in Design and Construction of Excavation Support Systems," Annual Geotechnical Conference, GZA GeoEnvironmental, Inc., March 5, 2005.
Spencer, S.W. "Not So Typical Cofferdam Design," Annual Geotechnical Conference, GZA GeoEnvironmental, Inc., March 8, 2003.




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Previous Projects


Representative Project – Dakota Creek Industries Shipyard Redevelopment Phase I & II

Anacortes, WA United States	
	<h3>Work Summary</h3> <p>Dakota Creek Industries Shipyard Redevelopment Phase I and II were a major redevelopment and expansion of the Dakota Creek Industries Shipyard.</p> <ul style="list-style-type: none">Phase I included demolition and removal of 24,000 square feet of timber dock, 1,000 creosote treated piles, 250 feet of abandoned marine railway, buildings and utilities.Approximately 36,000 cubic yards of contaminated sediments were cleaned up and removed, both in-water and upland.105,000 cubic yards of <i>non</i>-contaminated material was dredged utilizing custom bucket configurations developed by PPM and riprap slope protection placed.Two acres of upland area were developed, including a state-of-the art, two-stage storm water treatment system with new outfall, relocated further offshore, and a portion of the new deep-water berthing space was built to allow the existing dry-dock to be moved out of Guemes Channel into a protected basin.Despite abrasive bottom sediments consisting of steel, wire and timber pile, dredging and excavation tolerances were maintained throughout the project.Phase II consisted of constructing a 370-foot long heavy-load pier utilizing SPIN FIN pile technology and a ballast deck system and completion of upland utilities.
Project Data	
Organization: Dakota Creek Industries	
Dollar Amount: \$14,100,000	
Performance Period: May 2008 to December 2009	
Point of Contact: Mike Nelson	
Relevance to Contract	
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage complex logistics with a tight schedule.</i>✓ <i>Demonstrates ability to work perform complex remediation projects involving in-water and upland activities.</i>	


Representative Project – Former Chevron Kenai Facility

Nikiski, AK United States	
	Work Summary Contracted to provide the stone for a shoreline rehabilitation project and invited to perform the rehabilitation. <ul style="list-style-type: none">▪ Scope of work involved removing existing sheet pile wall with required backfill operations▪ Provide and maintain construction access▪ Excavation and offload trucking▪ Sheet pile removal and cut off▪ Toe construction and rock placement
Project Data	
Organization: Chevron Environmental Management Company	
Dollar Amount: \$Private Owner	
Performance Period: Apr 2012 to Sept 2012	
Point of Contact: Eugene Pak	
Relevance to Contract	
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage large-scale environmental remediation projects.</i>✓ <i>Demonstrates ability to successfully coordinate transload operations.</i>✓ <i>Demonstrates ability to perform challenging work in adverse conditions safely with ZERO accidents.</i>	

Representative Project – Asarco Pier and Piling Removal

Tacoma, WA United States	
	<h3>Work Summary</h3> <p>Removal and disposal of more than 2,500 creosote treated piling and three timber docks.</p> <ul style="list-style-type: none">▪ Scope of work involved demolition and upland disposal of three timber docks▪ Innovative shearing methodology utilized to remove piling in more than 30-ft of water▪ Classified Superfund site requiring water monitoring and ecological consideration to maintain strict environmental compliance▪ Material removed and disposed upland by rail▪ Approx. 11,000 cubic yards sand capping material and approx. 2,000 cubic yards quarry spalls placed▪ Abutment cribbing and additional dock demolition performed
Project Data	
Organization: WA State DNR	
Dollar Amount: \$2,300,000	
Performance Period: Sep 2010 to Feb 2011	
Point of Contact: Tim Goodman	
Relevance to Contract	
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage environmentally sensitive project.</i>✓ <i>Demonstrates ability to work closely with a Government Agency.</i>✓ <i>Demonstrates ability to successfully deliver remediation projects safely with ZERO accidents.</i>	


Representative Project – Bear Creek Hydro Electric Project

Sechelt, BC Canada		
	Work Summary Contracted to design and build a component of the 20MW Bear Creek Hydroelectric Project.	
	<ul style="list-style-type: none">▪ Scope of work involved installation of two penstocks along Bear Creek from top of valley to the turbine generator▪ Provided light to heavy work class equipment and labor▪ Provided design review and oversight▪ Supplied cable crane system designed to install 1,100 meters of exposed penstock over 500 meters of elevation change; first in North America.▪ Upper penstock constructed on steep back end of the valley developing 508 meters of gross head at the powerhouse below▪ Lower site with 125.8 meters of gross head consisted of powerhouse located near the shore of Clowhom Lake and an intake about 1 km upstream. Water conveyed to powerhouse via penstock▪ 12 MW “Upper” 8 MW “Lower”▪ Cast-in-place concrete construction for intake structures and power houses required 5,000+ cubic meters of concrete, including saddle for penstocks, anchor slab and foundation for a cable crane system.▪ Remote site; only accessible by boat, barge or helicopter	
	Project Data	
	Organization: Bear Hydro LP	
	Dollar Amount: \$54,900,000	
Performance Period: Jul 2010 to Jun 2012		
Point of Contact: Jean-Francois Martel		
Relevance to Contract		
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage complex logistics in a remote location.</i>✓ <i>Demonstrates ability to work in isolated environments, where equipment reliability is critical to project success.</i>✓ <i>Demonstrates ability to perform challenging work in adverse conditions safely with ZERO accidents.</i>		


Representative Project – Former Scott Paper Mill Cleanup Phase I

Anacortes, WA United States	
	<h3>Work Summary</h3> <p>Multi-phase project sponsored by the Port of Anacortes and Kimberly Clark to reclaim the Former Scott Paper site</p> <ul style="list-style-type: none">▪ Scope of work involved in-water and upland excavation , upland disposal and the construction of 2 new breakwaters▪ Water-based dredging and upland excavation of contaminated soil▪ 84,000 cubic yards Subtitle D material dredged, excavated, and transloaded▪ 20,000 cubic yards of non-contaminated material dredged for open-water disposal▪ 38,000 cubic yards clean material used as environmental capping and placed as backfill▪ Existing revetment structures removed. Two attenuators constructed; one 600-ft one 300-ft in length▪ 44,844 tons of armor and core stone placed: 41,985 tons of marine cap was placed by barge and land-based excavator 2,300 tons of attenuator stone was placed from land-based excavators▪ Stone placed by barge using GPS system and handling claw for precise placement▪ Environmental marine cap placed over the shoreline where remedial excavations occurred▪ Removal of material from site required strong coordination efforts to allow for efficient loading and transportation procedures▪ Small boat facility and offload apron constructed on existing pier▪ Environmental and community factors made this project highly visible to the public. Daily opportunities to discuss progress were made available to the Owner
Project Data	
Organization: Port of Anacortes	
Dollar Amount: \$15,489,000	
Performance Period: Oct 2009 to Jan 2011	
Point of Contact: John Herzog	
Relevance to Contract	
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage large-scale environmental remediation projects.</i>✓ <i>Demonstrates ability to successfully coordinate transload operations.</i>✓ <i>Demonstrates ability to perform large deep excavations in areas with heavy water influence and maintain dewatering needs.</i>	

Representative Project – Marine Terminal Berths 2 & 3 Interim Action Dredging

Olympia, WA United States	
	Work Summary Maintenance dredging of 9,700 cubic yards of contaminated material along the Olympia port facility pier. <ul style="list-style-type: none">▪ Scope of work involved dredging, transloading, and disposing of contaminated soils.▪ Placement of sand cap after dredge operations were completed.
Project Data	
Organization: Port of Olympia	
Dollar Amount: \$1,600,000	
Performance Period: January 2009- March 2009	
Point of Contact: Rick Anderson	
Relevance to Contract	
<ul style="list-style-type: none">✓ <i>Demonstrates ability to manage complex logistics with an extremely tight schedule.</i>✓ <i>Demonstrates ability to perform transloading and management of contaminated soils.</i>	

Representative Project – Terminal 115 Berth 2 Modifications

Seattle, WA United States	
	Work Summary <p>The purpose of the project was to build a new barge loading and unloading facility.</p> <ul style="list-style-type: none"> ▪ Included sheet pile installation, upland and in-water pile driving, maintenance dredging of contaminated materials, demolition and removal of an existing wooden pier, the rebuild of two existing piers including new steel fender system and installation of a ramp lifting mechanism. ▪ Terminal 115 is a Superfund site, requiring careful environmental consideration during the dredging activities, transloading, and disposal of the contaminated spoils. ▪ Efficient management of unforeseen site conditions, deficient design, inconsistent survey data and changing scope allowed PPM to meet and exceed the accelerated schedule. ▪
Project Data	
Organization: Port of Seattle	
Dollar Amount: \$2,800,000	
Performance Period: Dec 2009 – Apr 2010	
Point of Contact: Jerry Dowd	
Relevance to Contract	
<ul style="list-style-type: none"> ✓ <i>Demonstrates ability to execute a project in environmental sensitive areas with limited time to complete.</i> ✓ <i>Demonstrates ability to work with environmental agencies during remediation activities.</i> 	